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DEPARTMENT OF THE ARMY

Procurement Programs



Approved for public releases

Committee Staff Procurement Backup Book FY 1998 / FY 1999 Budget Estimate

MISSILE PROCUREMENT, ARMY

February 1997

APPROPRIATION

FOREST CALL SECOND

19970304 008

DITC QUALITY INSPECTED 1

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MISSILE PROCUREMENT, ARMY

APPROPRIATION LANGUAGE

equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes; equipment and training devices; expansion of public and private plants, including the land necessary including ordnance, ground handling equipment, spare parts, and accessories therefor; specialized For construction, procurement, production, modification, and modernization of missiles, equipment, therefor, for the foregoing purposes, and such lands and interests therein, may be acquired, and \$1,178,151,000 in fiscal year 1998 to remain available for obligation until September 30, 2000. construction prosecuted thereon prior to approval of title; and procurement and installation of

COMPARISON OF FY 1997 PROGRAM REQUIREMENTS AS REFLECTED IN THE FY 1997 BUDGET REQUEST WITH THE FY 1997 PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1998/99 BUDGET REQUEST (In Millions of Dollars)

Appropriation	FY 1997	FY 1997	
Missile Procurement, Army	Requirements per	Requirements per	Increase
	FY1997	FY1998/1999	ō
	Budget	Budget	(Decrease)
Activity 2 - Other Missiles	704	944	240
Activity 3 - Modification of Missiles	38	70	32
Activity 4 - Spares and Repair Parts	12	12	0
Activity 5 - Support Equipment and Facilities	12	12	0
Reimbursable Program	30	30	0
	962	1,068	272
EXPLANATION BY ACTIVITY			

MLRS Launcher (+67), ATACMS (+69), distribution of reductions for P.L. 104-208, SEC 8037 (-3), P.L. 104-208, SEC 8138 (-1). Activity 2 - Other Missiles - The net increase resulted from congressional adjustments to Javelin (+34), Avenger (+59), MLRS Rocket (+17), Activity 3 - Modification of Missiles - The net increase resulted from congressional adjustment to Patriot Mod (+12), Stinger Mod (+20), distribution of reductions for P.L.104-208, Sections 8138 and 8037 (-0.075).

Activity 5 - Support Equipment and Facilities - A proportionate reduction was made for Sections 8138 and 8037 of P.L.104-208 (-0.011). Activity 4 - Spares and Repair Parts - A proportionate reduction was made for Sections 8138 and 8037 of P.L. 104-208 (-0.011).

COMPARISON OF FY 1997 PROGRAM REQUIREMENTS AS REFLECTED IN THE FY 1998/99 BUDGET REQUEST WITH THE FY 1998 PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1998/1999 BUDGET REQUEST (In Millions of Dollars)

Appropriation	FY 1997	FY 1998	
Missile Procurement, Army	Requirements	Requirements	Increase
	FY1998/99	FY1998/1999	or
	Budget	Budget	(Decrease)
Activity 2 - Other Missiles	944	1,062	118
Activity 3 - Modification of Missiles	70	86	58
Activity 4 - Spares and Repair Parts	12	-	(1)
Activity 5 - Support Equipment and Facilities	-21	7	(2)
Reimbursable Program	30	180	150
	1,068	1,358	290

EXPLANATION BY ACTIVITY

Activity 2 - Other Missiles - The net increase results from: BMDO funding transfer for PAC 3 (+349) and increased ATACMS

Block IA buy (+23); completion of quantity buys for Avenger (-78), Helifire II (-93), and MLRS

Rocket (-39) along with funding decrease to Javelin (-18), TOW (-12) and other program adjustments (-14).

Activity 3 - Modification of Missiles - The net increase results from: start of ITAS buy (+63), funding decrease in Stinger (-24),

Patriot (-3), MLRS (-4) Mods, and no funding for Dragon Mod (-3).

Activity 4 - Spares and Repair Parts - The net decrease results from minor funding adjustments to Initial Spares and Repair Parts (-1).

Activity 5 - Support Equipment and Facilities - The net decrease results from decrease to Air Defense Targets (-5).

Reimbursable Program - The net increase results from projected increase in Federal (+78) and FMS (+54) sales.

COMPARISON OF FY 1998 PROGRAM REQUIREMENTS AS REFLECTED IN THE FY 1998/99 BUDGET REQUEST WITH THE FY 1999 PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1998/1999 BUDGET REQUEST (In Millions of Dollars)

Appropriation	FY 1998	FY 1999	
Missile Procurement, Army	Requirements	Requirements	Increase
	FY1998/99	FY1998/1999	or
	Budget	Budget	(Decrease)
Activity 2 - Other Missiles	1,062	1,417	355
Activity 3 - Modification of Missiles	86	96	(2)
Activity 4 - Spares and Repair Parts	=	21	10
Activity 5 - Support Equipment and Facilities	7	7	0
Reimbursable Program	180	164	(16)
	1,358	1,705	347

EXPLANATION BY ACTIVITY

Activity 2 - Other Missiles - The net increase results from: increased quantity buys for Patriot (+21), Longbow Hellfire (+64), Javelin (+184), and BAT (+15); start quantity buy for ER-MLRS (+16), ATACMS Block II (+61), and other adjustments (-6).

Activity 3 - Modification of Missiles - The net decrease results from adjustments to modification programs (-2).

Activity 4 - Spares and Repair Parts - The net increase results from an increase in Spares and Repair Parts for Javelin (+4), and MLRS Launcher (+6). Reimbursable Program - The net decrease results from: increase in sale of Javelin to USMC (+42), no anticipated sale of MLRS Rocket/Launcher (-54) and minor adjustments associated with the sale of several other items (-4).

Index for MISSILE PROCUREMENT, ARMY

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į	P-1 EXHIBIT			P1-1
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· ~	AVENGER SYSTEM SUMMARY	C14900	28600147.98P	7
က	HELLFIRE SYS SUMMARY	C70000	21338139,98P	17
4	JAVELIN (AAWS-M) SYSTEM SUMMARY	CC0007	20648139.98P	3
່ຕ	JAVELIN (AAWS-M) ADV PROC	CC0007	20649139.98P	39
ဖ	TOW 2 SYSTEM SUMMARY	C59300	22104139.98P	41
	MLRS ROCKET	C65400	25900139.98P	46
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F	ATACMS/BAT	CA6101	26800139.98P	71
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8	SPARES AND REPAIR PARTS	CA0250	21242107.98P	166
19	AIR DEFENSE TARGETS	C93000	21242115.98P	167
8	ITEMS LESS THAN \$2.0M (MISSILES)	CL2000	23902147.98P	172
21	MISSILE DEMILITARIZATION	HL2000	24094147.98P	174
22	PRODUCTION BASE SUPPORT	CA0100	24662144.98P	176

Activity: 2. **OTHER MISSILES**

DEPARTMENT OF THE ARMY FY 98/99 PROCUREMENT PROGRAM

Appropriation: **MISSILES**

			(a)				THOUSANDS OF DOLLARS	71100117	BC)		
N.	WELL		(DOLS) FY 98	Ĺ	FY 96		FY 97	0 000	FY 98	ľ	FY 99
Š Š	NOMENCLATURE	Ω	LIND								
			COST	QTY	COST	QTY	COST	QTY	COST	OTY	COST
(1)	(2)	<u>@</u>	£	(£)	(9)	ε	(8)	(6)	(10)	E)	(12)
	SURFACE-TO-AIR MISSILE SYSTEM										_
-	PATRIOT SYSTEM SUMMARY (MYP) (C49100)	∢	6,713,634		4,924			52	349,109	89	369,885
7	AVENGER SYSTEM SUMMARY (C14900)				30,532		71,913				
	SUB-ACTIVITY TOTAL				35,456		71,913		349,109		369,885
	AIR-TO-SURFACE MISSILE SYSTEM		,		_						
ო	HELLFIRE SYS SUMMARY (C70000)	<	190,912	1,102	235,954	2,805	357,254	1,465	279,687	2,000	345,433
	SUB-ACTIVITY TOTAL				235,954		357,254		279,687		345,433
	ANTI-TANK/ASSAULT MISSILE SYSTEM										·
4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)		132,511	1,010	200,858	1,020	161,281	1,080	143,112	3,316	326,623
ហ	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007) ADVANCE PROCUREMENT (CY)						34,000				
ဖ	TOW 2 SYSTEM SUMMARY (C59300)	∢	٠	-	989'6	-	13,571		1,326		
7	MLRS ROCKET (C65400)			1,326	44,607	1,674	41,404		2,863	534	18,955
80	MLRS LAUNCHER SYSTEMS (C66400)		3,539,620		81,093		103,703	59	102,649	32	92,457
6	ARMY TACTICAL MSL SYS (ATACMS) -SYS SUM	4	748,326	120	121,303	97	91,815	153	114,494	160	120,400
	(C98510) LESS: ADVANCE PROCUREMENT (PY)								-16,680		-17,440
					121,303		91,815		97,814		102,960

DEPARTMENT OF THE ARMY FY 98/99 PROCUREMENT PROGRAM

Appropriation: **MISSILES**

Activity: 2. **OTHER MISSILES**

			(DOLS)				(THOUSANDS OF DOLLARS)	OF DOLL	ARS)		
LINE NO	ITEM NOMENCLATURE	٥	FY 98 UNIT	u.	FY 96		FY 97		FY 98		FY 99
)	COST	ΩΤΥ	COST	QTY	COST	QTY	COST	QTY	COST
(1)	(2)	ල	(4)	(2)	(9)	(7)	(8)	(6)	(10)	(11)	(12)
9	ARMY TACTICAL MSL SYS (ATACMS) -SYS SUM										
	(CSBS1U) ADVANCE PROCUREMENT (CY)						000'69				
F	ATACMS/BAT (CA6101)	∢						_		20	60,781
12	BAT (CA6100)	∢	279,370					305	85,208	547	100,137
	SUB-ACTIVITY TOTAL				457,547		514,774		432,972		701,913
	ACTIVITY TOTAL				728,957		943,941		1,061,768		1,417,231

Activity: 3. **MODIFICATIONS**

DEPARTMENT OF THE ARMY FY 98/99 PROCUREMENT PROGRAM

Appropriation: **MISSILES**

NO G

13

4

16

5

17

		(DOLS)				(THOUSANDS OF DOLLARS)	OF DOLLA	(RS)		
ITEM NOMENCI ATURE	٩	FY 98 UNIT		FY 96		FY 97	-	FY 98		FY 99
		COST	QTY	COST	αтγ	COST	QTY	COST	QTY	COST
(2)	(8)	(4)	(2)	(9)	(2)	(8)	(6)	(10)	<u>(£</u>	(12)
MODIFICATIONS										
PATRIOT MODS (C50700)				6,767		23,442		20,825		15,575
STINGER MODS (C20000)				11,304		36,860		12,411		14,413
ITAS/TOW MODS (C61700)				40,728		16		62,755		63,774
DRAGON MODS (C57300)				299		3,178				
MLRS MODS (C67500)				27,475		6,410		2,188		2,239
SUB-ACTIVITY TOTAL				86,941		906'69		98,179		96,001
ACTIVITY TOTAL				86,941		906'69		98,179		96,001
	-									
								3		

EXHIBIT P-1 February 1997

DEPARTMENT OF THE ARMY FY 98/99 PROCUREMENT PROGRAM

Appropriation: **MISSILES**

Activity: 4. **SPARES AND REPAIR PARTS**

	FY 99	COST	(12)		21,385	21,385	21,385	
		QTY	(11)					
ARS)	FY 98	COST	(10)		11,381	11,381	11,381	
OF DOLL		QTY	(6)		·			
(THOUSANDS OF DOLLARS)	FY 97	COST	(8)		12,078	12,078	12,078	
		QTY	(2)				- · · · · · ·	
	FY 96	COST	(9)		11,500	11,500	11,500	
	<u> </u>	QTY	(5)					
(DOLS)	FY 98 UNIT	COST	(4)					
	٥		(3)					
	ITEM NOMENCLATURE		(2)	**SPARES AND REPAIR PARTS**	SPARES AND REPAIR PARTS (CA0250)	SUB-ACTIVITY TOTAL	ACTIVITY TOTAL	
	NO S		(1)		8		-	

DEPARTMENT OF THE ARMY FY 98/99 PROCUREMENT PROGRAM

EXHIBIT P-1 February 1997

Appropriation: **MISSILES**

Activity: 5. SUPPORT EQUIPMENT AND FACILITIES**

		-					(THOOSANDS OF DOLLARS)	25	ARS)		
ITEM NOMENCLATURE		٥	FY 98 UNIT		FY 96		FY 97		FY 98		FY 99
			COST	QTY	COST	QTY	COST	QTY	COST	ΩΤΥ	COST
(2)		(3)	(4)	(2)	(9)	(2)	(8)	(6)	(10)	(11)	(12)
SUPPORT EQUIPMENT AND FACILITIES	**S										·
AIR DEFENSE TARGETS (C93000)					6,595		6,195		866		966
ITEMS LESS THAN \$2.0M (MISSILES) (CL2000)					971		991		954		941
MISSILE DEMILITARIZATION (HL2000)					1,643		1,532		1,507		1,496
PRODUCTION BASE SUPPORT (CA0100)					2,848		3,466		3,364		3,325
SUB-ACTIVITY TOTAL					12,057		12,184		6,823		6,758
ACTIVITY TOTAL					12,057		12,184		6,823		6,758
APPROPRIATION TOTAL					839,455		1,038,109		1,178,151		1,541,375
									,		-
								•			
							-				

PROCUREMENT PROGRAM-INSTALLATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	Prior Yrs	FY97	FY98	<u>FY99</u>	EY00	FY01	FY02	FY03	Total
PATRIOT MODS	10.4	1.2	1.6	1.4	1.8	2.2	1.8	4.1	21.8
TOW MODS	16.9	0.0	0.1	2.1	0.2	0.3	0.3	4.	21.3
MLRS MODS	204.2	6.4	2.2	2.2	2.3	2.6	5.6	2.5	225
TOTAL FOR MISSILE MOD	231.5	7.6	9.0	5.7	4.3	5.1	4.7	ა ზ	268.1

							DATE				
	ă	BUDGET ITEM JU	M JUSTIFICA	STIFICATION SHEET	터			February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUF	MISSILE PROCUREMENT /Other Missiles	siles				PA1	PATRIOT SYSTEM SUMMARY (MYP) (C49100)	MARY (MYP) (C49	100)	
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY	6475			52	89	180	212	220	240	228	7675
COST (in millions)	9629.1	4.9	0.0	349.1	369.9	459.2	445.4	433.1	396.8		12087.5
Initial Spares (in millions)	344.3										344.3
Total (in millions)	9973.4	4.9		349.1	369.9	459.2	445.4	433.1	396.8		12431.8
Unit Cost (in millions)	1.5			6.7	5.4	2.6	2.1	2.0	1.7		1.6

and ballistic missiles likely to be encountered by US Forces during the 90's and beyond. The system utilizes a multifunction Phased Array Radar, a digital presence of Electronic Countermeasures (ECM) and able to conduct multiple simultaneous engagements against high performance air breathing targets logistics costs associated with the replaced systems while providing improved high and medium altitude air defense. Deployment is to the field Army and computer controlling system functions, a guidance system combining command and homing (track-via-missile) features, and provides the operator the ability to control operations. PATRIOT totally replaced Nike Hercules and partially replaced HAWK. It has the advantage of reducing manpower and DESCRIPTION: PATRIOT is an advanced Surface-to-Air guided missile system with a high single shot kill probability capable of operation in the he system is integrated with the U.S. Air Force in the overall air defense of the theater of operations

command, control, and computer capability, will increase PATRIOT's effectivity, survivability, flexibility of defense design, footprint and detection of smaller The PATRIOT Advanced Capability (PAC)-3 program is a result of a series of integrated, phased system improvements in combination with the PAC-3 missile which utilizes hit-to-kill technology. Modification to the system, which includes radar enhancements, communication upgrades and increased low radar cross section targets.

JUSTIFICATION: FY98-FY03 includes costs for PAC-3 missile and modifications to support equipment.

Cooperative Agreements:

U.S. Owned/FRG Manned - The Memorandum of Understanding for enhancing air defense for Central Europe dated 6 Dec 84, providing U.S. support to US owned/FRG Manned PATRIOT Fire Units.

NATO Maintenance and Supply Agency (NAMSA) - DOD directed requirement to support the European and NATO deployed units (International agreement Germany, the Netherlands and the U.S. for common logistics support of PATRIOT)

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2	ET ACTIVIT	N/BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2 / Other Missiles	er Missiles	B. WEAPON	N PATRIOT	NOT	J	c. MANUFACTURER NAME Raytheon, Andover, MA	₹	D. DATE Febn	4TE February 1997
N Selection N	₽		FY 96			FY 97			FY 98			FY 99	
Cost Elements	8	TotalCost	Ago .	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Q Ş	UnitCost	TotalCost	Q Çŧ	UnitCost
		\$000	Each	\$000	\$000	Each	\$000		Each	\$000	\$000	Each	\$000
Missile Hardware- Recurring SubTotal Missile Hardware								114604	52	2204	132385	89	1947
Non-Recurring Costs													
Total Flyaway								114604	-		132385		
Ground Support Equipment Radar Phase III CDI Phase III RLCEU Command and Launch System								38000 14800 21900			37000 13800 22700		
Modification Spares Total Ground Support Equipment								39300 135200		· · · · · · · · · · · · · · · · · · ·	32200 145500		
SubTotal C&L Hardware								249804			277885		
Support Cost Contractor Engineering Government Engineering SEPM Integrated Logistics Support NAMA		2200						29300 21905 20655 11950 5317			27200 20500 19300 11200 4300		
DMPE Fielding SubTotal Support Cost		2724 4924						5000 5178 99305			4600 4900 92000		
Gross P-1 End Cost Less: Prior Year Adv Proc Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc. Other Non P-1 Costs		4924						349109			369885		
Initial Spares MODS MOD Initial Spares		6767 3385			23442 6975		***	20825 2732			15575 3622		
TOTAL		15076			30417			372666			389082		
								12.					
	\neg												

B. APPROPRIATION / BUDGET ACTIVITY MISSILE PROCUREMENT / 2 / Other Missiles CONTRACT CONTRACT CONTRACT AND TYPE AND TYPE PATRIOT MSL MULTIYEAR FY87 Raytheon Co Andover, MA SSFPM-5(1)* FY89 FY99 Raytheon Co Andover, MA SSFPM-5(3)* FY90 Raytheon Co Andover, MA SSFPM-5(4)* FY90 Raytheon Co Andover, MA SSFPM-5(4)* FY91 Raytheon Co Andover, MA SSFPM-5(5)* FY91 Raytheon Co Andover, MA SSFPM-5(5)* FY91 Raytheon Co Andover, MA SSFPM-5(5)* Raytheon Co Andover, MA SSFPM-5(5)* Raytheon Co Andover, MA SSFPM-5(5)* FY91 Raytheon Co Andover, MA SSFPM-5(5)* FY91 FY91	CONTRACTED BY		C P-1 ITEM NOMENCI ATURE					February 1997
SCAL YEAR CONTRACTOR AND LOCATION CONTRACTOR AND LOCATION CONTRACTOR AND LOCATION Raytheon Co Andover, MA	CONTRACTED BY			OMENCLATU				
SCAL YEAR CONTRACTOR AND LOCATION Raytheon Co Andover, MA	CONTRACTED BY				PATRIOT			
Raytheon Co Andover, MA		AWARD DATE	DATE OF FIRST	ντα	UNIT COST			F YES W/A
Raytheon Co Andover, MA			DELIVERY	Each	\$	A ON	REOLD	
Raytheon Co Andover, MA								
Raytheon Co Andover, MA		Mar-87	Jan-89	200	502000			
Raytheon Co Andover, MA Raytheon Co Andover, MA Raytheon Co Andover, MA Raytheon Co Andover, MA	_	Nov-87	Jan-90	715	474000		:	
Raytheon Co Andover, MA Raytheon Co Andover, MA Raytheon Co Andover, MA		Nov-88	Sep-90	815	475000	YES	9 9	
Raytheon Co Andover, MA Raytheon Co Andover, MA		Nov-89	Aug-91	812	497000	YES YES	2 2	
Raylleon Co Andover, MA		Mov-90	Ze-inc	200	322000	2 2	2 2	
רואין יוסטיויל סט ווספווילפרון		May-92		97	714000	YES	9	
								
Andover, MA		Mar-87	Jan-89	7 5	A/S			
Raytheon Co Andover, MA		Nov-87	Jan-90	27.5	Z Z	Į,	<u> </u>	
Raytheon Co Andover, MA		Nov-88	Jan-91	2 9	¥ .	ה ל ה	2 9	
Raytheon Co Andover, MA		Mar-90	Feb-92	2	A/Z	YES	2 9	
FY91 Raytheon Co Andover, MA SS/FPM-5(s)	MICOM	Nov-90	Jan-93	ē	Α/Z	YES	<u>9</u>	
MAVS Taclied Symple	WOO W	Nov-97	Anr-99	52	2204000	V.		
Dallas, TX	MICOM	Nov-98	Apr-00	89	1947000	A A		
					_			
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(1) Raytheon Company contract includes Martin Marietta (Orlando, FL) as subcontractor for missiles.
(2) Sole Source Procurement is necessary because only the development contractors possess the technical expertise necessary to perform the effort without duplication of time, funds and effort already expended.
(3) Fire Unit cost contains one Radar, one Engagement Control Station, and eight Launchers. Missile unit cost does not contain warhead cost.
* Contract contains economic price adjustment clause. No cost has been recouped to date.

	1						<u>.</u>	ITEM	NOME	P-1 ITEM NOMENCLATURE	TURE											DATE							
FY 98/99 BUDGEL PHODUCTION SCHEDULE		CHON	37		200		+	ļ				O TOO NOON		PATHIOI	ੂ		ı	ļ	ı	ı	┪		Fet	_	February 1997	ار 199	۶		
	Σ		cr.	2 2	ACCEP.						Ž	5	֓֟֞֟֓֓֓֓֟֓֓֓֓֟֓֓֓֓֟֓֓֟֓֟֓֓֟֟֓֓֓֟֓֓֟֟֓֓֟	30 Calendar Voor 08	7	100	g	╛			l	LISC	al Ye	ear s	al Year 99	00			۰ د
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Exhibit P-40	Budget Item Justification Sheet

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	BUE	BUDGET ITEM JUSTI	TIFICATION SHEET	EET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	TIVITY			P-1 ITEM NOMENCLATURE	ų.			
	MISSILE PROCUREMENT /Other Missiles	VT /Other Missiles				AVENGER SYSTEM SUMMARY (C14900)	SUMMARY (C14900)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	30.5	71.9	0.0	0.0	0.0	0.0	0.0	0.0

Description:

night, and in clear or adverse weather. The system incorporates an operator's position with controls, displays, fire control electronics, and the Standard Vehicle Mounted Launcher (SVML). The SVML includes seeker coolant bottles and related hardware and it supports and launches multiple STINGER missiles. The SVML provides output signals that can be used to display to the gunner exactly where the STINGER is pointed. The driven purpose Wheeled Vehicle (HMMWV). It is operated by a two man crew for defense against helicopters and fixed wing aircraft at low altitude, day or The AVENGER System is a lightweight, highly mobile/transportable surface-to-air missile/gun weapon system mounted on a High Mobility Multioperates with standard unmodified Basic STINGER, STINGER-POST or STINGER-RMP missile rounds. AVENGER fills the Line-of-Sight Rear sight reticule capability aids the gunner in severe background clutter and Electromagnetic Counter Measure (ECM) environments. The system (LOS-R) role in Forward Area Air Defense Systems (FAADS).

Marine Corps and other services could take advantage of the Army's contract and favorable pricing terms. FY 97 procures the remainder of the multi-A five year multiyear procurement (MYP) contract for AVENGER began in FY91. In 1994, Congress agreed to a provision in the FY95 budget that would grant a one year extension, at no additional cost, for extending the delivery schedule of AVENGER multiyear procurement authority so the year procurement (93 fire units) for the Army National Guard.

Justification:

AVENGER constitutes the Line-Of-Sight Rear (LOS-R) component of the Forward Area Air Defense System (FAADS), and it is the first FAADS element fielded

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 2	T ACTIVITY PROCURE	N/ BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2 / Other Missiles	er Missiles	B. WEAPON AVENGI	N SER SYSTEM 6	WEAPON AVENGER SYSTEM SUMMARY (C14900)		C. MANUFACTURER NAME Various		D. DATE Febn	TE February 1997
Missiles	₽		FY 96			FY 97			FY 98			FY 99	
nts	8	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
HARDWARE		000\$	Each	000\$	000\$	Each	000\$	000\$	Each	\$000	000\$	Each	000\$
Drive Hardware Turrent Assembly Army Unapplied EOQ EOQ Diverted to USMC					35208	93	379						
SubTotal Missile Hardware					35208						,		
PROCUREMENT SUPPORT Contractor Engineering Government Engineering Project Management Administration		2726 2020 420			4947 4716 464			-					
TOTAL PROCUREMENT		5166			45335								
Command & Launch Hardware Std Veh Mtd Launcher (SMVL) Army Other GEE - Army calv					15345	86	165						
Other (HMMWV)					4669	93	50	.,,,					
SubTotal C&L Hardware					20014								
Support Cost Peculiar Support Equipment Institutional Conduct of Fire Trainers(ICOFT) Force On Force Trainers (FOFT)		2115 8190 6785			5500 1003								
Fielding Interim Contractor Spt (Machinegun) Other (FDT)		6261 2015			. 61		· · · · · · · · · · · · · · · · · · ·	**************************************					
SubTotal Support Cost		25366			6564								
Gross P-1 End Cost		30532			71913								
Net P-1 Full Funding Cost		30532			71913								
PLUS P-1 CY Adv. Proc. Other Non P-1 Costs Initial Spares								<i>,</i> -					
MOD Spares		987											
TOTAL		31519			71913								

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B APPROPRIATION / BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE	OMENCLATUR	- -		(11)	
		MISSILE PROCUREMENT / 2 / Other Missiles					AVENGER	YSTEM SUMM	RY (C1490		
LINE ITEM /	LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$000	SPECS AVAIL NOW F	SPEC IF Y REV REQ'D	IF YES W/A
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вемапк s: * No quanti	* No quantity shown in FYDP, however, Army plans to procure	Army plans to procure 93 fire units.									

							P-1 ITEM NOMENCLATURE	MON M	ENCL	ATURE										Ī	DATE							
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	Simn	Simulator and Training Device Justification	aining Devi	ce Justifica	ıtion			Februa	February 1997
Appropriation / P-1 Line Item	Item		Weapon System (if applicable)	cable)		Equipment Nomenclature	a		PE
MISSILE PROCU	MISSILE PROCUREMENT/AVENGER TRAINING DEVICES	AINING DEVICES		AVENGER			TRAINING DEVICES		C15200
Fin Plan	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Total
Quantity (Each)									
Proc (\$000)	27626	6503							34129
RDT&E (\$000)									
\$ 00 (\$000)						:			

TRAINING SYSTEM DESCRIPTION:

Description:

and building-up proficiency in the collective environment is hampered, because there are no sustainment training devices in the field specifically The operators and maintainers leave the initial entry training courses with less than adequate training. The further development of critical skills Operator and Redstone Arsenal-Maintainers) depend on actual AVENGER fire units to conduct training. This method of training was in place The training devices being procured and supported for the AVENGER Air Defense Weapon System are essential to establish adequate and AVENGER fire units requires a higher instructor-to-student ratio, limits the depth of training, and causes higher operating and support costs. programs are seriously deficient in terms of training tasks and the cost to operate/sustain. Both operator and maintainer courses (Ft. Blisscost effective initial entry and sustainment training programs for the AVENGER operators and maintainers. The current initial entry training because there were no development funds for training devices in the baseline Non-Developmental Item (NDI) program. The use of actual designed for the AVENGER operators and maintainers.

Justification:

This training device program will put in place Institutional Conduct of Fire Trainers (ICOFT) at Ft. Bliss, Texas for operator and leadership training. The Force-On-Force Trainers (FOFT) will support the operator in a field environment for collective training.

NOTE: Training device funding in FY 95 for \$8.933 million was not utilized to procure training equipment. These funds were used for production support and total package fielding costs associated with fire units procured in FY 94.

Simulato	Simulator and Training Device Justification (Page 2)	Device J	ustificat	ion (Pa	ge 2)					Date Fe	February 1997	197
Appropriation / P-1 Line Item		Weapon System (if applicable)	if applicable)		ľ	IOC Date	Equipmen	Equipment Nomenclature				PE
MISSILE PROCUREMENT/AVENGER TRAINING DEVICES	NING DEVICES		AVENGER			3088		T	TRAINING DEVICES	DEVICES		C15200
		اع	Ready	Avg	Prio	Prior Years	Ţ	FY 1997	Œ	FY 1998	Ш	FY 1999
Training Device By Type	Site	Date	For Tng Date	Student	Qt	Cost	Qty	Cost	Qty	Cost	Ωty	Cost
					Each	\$000	Each	\$000	Each	\$000	Each	000\$
Captive Flight Trainers (CFT)	Unit Locations	End of FY94	NOW	1	749	12651						
ICOFT	Ft. Bilss, TX	FY97	FY97	299	8	8190	2	5500				
FOFT	NTC/RANGES	FY97	Jan-00		22	6785	8	1003				
					· ·							
				:								
									·			
Total						27626		6503				

Simi	ulator	Simulator and Trainin	ng De	ig Device Justification (Page 3)	ificatio	ın (Page 3	€			DATE	February 1997	
Training Device By Type Captive Flight Trainers (CFT)						Weapon System (if applicable) AVENGER	applicable)					
Description Justification The Captive Flight Trainer is used to train the AVENGER operator to track and acquire targets. It is also used to train proficiency in the field and system check-out.	er is use	ed to train the	AVEN	GER operatu	or to trac	k and acqui	re target	s. It is also	used to	train proficie	ency in th	ne field and
i	Pric	Prior Years	1	FY 1997	1	FY 1998	FY	FY 1999	Cost T	Cost To Complete	To	Total Cost
Financial Plan	ģ	Cost	Ş	Cost	Qt	Cost	Öţ	Cost	Qty	Cost	Q	Cost
	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000
HARDWARE COSTS Device (hardware) ECOs Nonrecurring	749										749	12651
GFE Other (Specify)												
SubTotal Hardware Costs SUPPORT COSTS	749	12651									749	12651
Special SE Integrated Logistics Support Other (Specify)			,									
SubTotal Support Costs Software/Courseware												
TOTAL COSTS		12651										12651

Sim	ılator 8	Simulator and Training Device Justification (Page 3)	ng De	vice Justi:	ficatio	n (Page 3	≅			DAIE	February 1997	
Training Device By Type ICOFT			•			Weapon System (if applicable) AVENGER	applicable)					
Description / Justification The ICOFT is a six student training station device needed to more efficiently train initial entry AVENGER operators at Ft. Bliss, TX.	ent traini	ing station de	vice ne	eded to morr	e efficier	ntly train init	ial entry	AVENGER	operato	rs at Ft. Blis	3s, TX.	
	Pric	Prior Years	1	FY 1997		FY 1998	Ā	FY 1999	Cost	Cost To Complete	۴	Total Cost
Financial Plan	ğ	Cost	Öţ	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000
HARDWARE COSTS Device (hardware)	3	9608	2	5412							Ω	13508
ECOs												
Nonrecurring							,					
GFE				. 6								, CO
Program Mgmt		94		88								78L
	,			İ								
SubTotal Hardware Costs	က	8190	N	9900							ດ	06951
SUPPORT COSTS												
Special SE				-						-115		
Integrated Logistics Support												
Omer (specify)					<u>-</u>							
												_
SubTotal Support Costs												
Software/Courseware												
TOTAL COSTS		8190		5500								13690

	lator a	Simulator and Training Device Justification (Page 3)	ng De	vice Justi	ficatio	งท (Page 3	€		, ···	UAIT	February 1997	
Training Device By Type FOFT						Weapon System (if applicable) AVENGER	applicable)				:	
Description / Justification The AVENGER FOFT will be provided to the train in a simulated combat environment.	ill be pro bat envir	ovided to the ronment.		National Training Center (NTC) and instrumented ranges to enable the operators and leaders to	enter (N	ITC) and ins	trumente	ed ranges to	o enable	the operato	rs and le	aders to
i	Pric	Prior Years	 E	FY 1997	Ĺ	FY 1998	F	FY 1999	Cost T	Cost To Complete	10°	Total Cost
Financial Plan	Şţ	Cost	Qt	Cost	Qty	Cost	ğ	Cost	δ	Cost	Ş	Cost
	Each	\$000	Each	\$000	Each	000\$	Each	\$000	Each	\$000	Each	\$000
HARDWARE COSTS												
Device (hardware)	22	5891	80	606							90	0089
ECOs		800									•	800
Nonrecurring												
GFE												
Program Mgmt		94		94								188
SubTotal Hardware Costs	22	6785	ω	1003							30	7788
Special SF							-					
Integrated Logistics Support												
Other (Specify)												
			-									
SubTotal Support Costs									~~~			
Software/Courseware		-										
TOTAL COSTS		£79E		7								1
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Exhibit P-40F	ication Shee
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	T	JDGET ITEN	BUDGET ITEM JUSTIFICATION SHEET	TION SHE	Ha			February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	les					HELLFIRE SYS SU	HELLFIRE SYS SUMMARY (C70000)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
OUANTITY	46590	1102	2805	1465	2000	2030	2020	2020	2060		62092
COST (in millions)	1959.5	236.0	357.3	279.7	345.4	287.3	298.6	249.9	210.7	49.0	4273.3
Initial Spares (in millions)	7.5										7.5
Total (in millions)	1967.0	236.0	357.3	279.7	345.4	287.3	298.6	249.9	210.7	49.0	4280.8
Unit Cost (in millions)	0.04	0.21	0.13	0.19	0.17	0.14	0.15	0.12	0.10		0.02

Description:

will be used by the RAH-66 Comanche, the Army's next generation Helicopter. Production buys are scheduled to support training, testing, fielding, and countermeasures and advanced reactive armors. Using its semi-active laser homing guidance system, Laser HELLFIRE is perfectly suited for precision ability of the AH-64D Longbow Apache Helicopter to operate in adverse weather, battlefield obscurants, and dramatically increases aircraft survivability. strikes at a variety of individual hardpoint targets, while minimizing exposure of the aircraft and supporting troops. Longbow HELLFIRE maximizes the HELLFIRE is an air-to-ground missile system designed to defeat individual targets and minimize exposure of the delivery vehicle to enemy fire. Laser deployment of these aircraft. Beginning in FY 90, the missile was reconfigured with an interim warhead to improve lethality against near term threat HELLFIRE II includes hardening of the laser seeker against countermeasures, further warhead improvements for the long term, replacement of the reactive armor. Development of the HELLFIRE II was completed in 3rd Otr, FY 93. The first full production contract was awarded on 26 May 93. missile. HELLFIRE is the primary anti-tank armament of the AH-64 Apache, OH-58D Kiowa Warrior, and Special Operations Helicopters and HELLFIRE uses semi-active laser terminal guidance; Longbow HELLFIRE uses a radio frequency guidance section and is a fire-and-forget mechanical fuse with an electronic fuse, and restoration of the original length and weight. HELLFIRE II will defeat all known electro-optical HELLFIRE II and Longbow HELLFIRE are complementary. Both are required on the modern battlefield.

Longbow HELLFIRE began production in FY 95 with Long Lead Items and Initial Production Facilitization.

Missiles Cost Analysis	خ د	A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 2	T ACTIVITY	N BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2 / Other Missiles	ıer Missiles	B. WEAPON HELLI	LFIRE SYS SU	APON HELLFIRE SYS SUMMARY (C70000)		C. MANUFACTURER NAME HELLFIRE Sys Lim Liab Co/Lonabow Lim Liab Co	RER NAME Sys Lim Liab Lim Liab Co	D. DATE Febn	TE February 1997
₽			Fγ 96			FY 97			FY 98			FY 99	
5	8	TotalCost	ģ	UnitCost	TotalCost	ģ	UnitCost	TotalCost	Qţ	UnitCost	TotalCost	Qty	UnitCost
+	+	0000	Each	000\$	000\$	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
				ü									
		167327	1102	152	296604	2856	104	230024	1465	157	300505	2000	150
		4549	3454	=	2351		-	2283	1465	7	3185	2000	2
		6176			8610			7316			7495		
		3339			4153			3651			5026		
		6287			4613			5442			5564		
		188395			319034			251199			324805		
		6101	<u> </u>	•	8088			Cono			0744		
		10184			11379			8582			8523 8523		
		16305		<u>-</u>	20207			17530		-	17234		
		12309			1999						2277		
		18945			4914			2459					
		31254			18013			7699 10158			2277		
		235954			357254			278887			344316		
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Exhibit	Justification
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	8	JDGET ITEN	BUDGET ITEM JUSTIFICATION SHEET	ATION SHEE	h::			February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY	YINI				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	lles				LASE	LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)	ASIC/IHW/HFII) (C7	70100)	
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
CLIANTITY	46590	750	1800								49140
COST (in millions)	1889.1	50.7	108.0	15.0	16.9	0.0	0.0	0.0	0.0		2079.7
Initial Spares (in millions)	5.7										5.7
Total (in millions)	1894.8	50.7	108.0	15.0	16.9						2085.4
Unit Cost (in millions)	0.04	0.07	90.0								0.04

Description:

against near term threat reactive armor. Development of HELLFIRE II was completed in 3rd Qtr, FY 93. The first full production contract was awarded on 26 May 93. HELLFIRE II includes hardening of the laser seeker against countermeasures, further warhead improvements for the long term, replacement training, testing, fielding, and deployment of these aircraft. Beginning in FY 90, the missile was reconfigured with an interim warhead to improve lethality countermeasures and advanced reactive armors. Using its semi-active laser homing guidance system, laser HELLFIRE is perfectly suited for precision HELLFIRE uses semi-active laser terminal guidance and is the primary anti-tank armament of the AH-64 Apache, OH-58D Kiowa Warrior, and Special Operations Helicopters and will be used by the RAH-66 Comanche, the Army's next generation Helicopter. Production buys are scheduled to support HELLFIRE is an air-to-ground missile system designed to defeat individual targets and minimize exposure of the delivery vehicle to enemy fire. Laser of the mechanical fuse with an electronic fuse, and restoration of the original length and weight. HELLFIRE II will defeat all known electro-optical strikes at a variety of individual hardpoint targets, while minimizing exposure of the aircraft and supporting troops.

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO MISSII F PROCLIBEMENT / 2	ET ACTIVITA PROCLIBE	on / BUDGET ACTIVITY TITLE/NO MISSII E PROCI IBEMENT / 2 / Other Missiles	or Missiles	B. WEAPON	אבו ו מוסב אינ	WEAPON		C. MANUFACTURER NAME		D. DATE	1007
missiles cost Alidiysis				100 / 2 / 100	SOURCE IN SOURCE	ושפעיו	(CZ0100)	SE (BASIC/INW/I	(11.11)	HELLFINE SYSTOMS LIF Liability Company	stems Limited	repr	rebruary 1997
Missiles	₽		FY 96			FY 97			FY 98			FY 99	
Cost Elements	СБ	TotalCost	Qty	UnitCost	TotalCost	Oth	UnitCost	TotalCost	Ş Ö	UnitCost	TotalCost	δ	UnitCost
		000\$	Each	\$000	000\$	Each	000\$	000\$	Each	\$000	000\$	Each	\$000
Flyaway Costs									<u></u>				
All-Up-Rounds		34133		46	83404	1800	46					•	
Containers		4549	3454	_	2351		_						
GIFE EXPLOSIVES Engineering Continue		441			1112								
Engineering Change Orders		782			3418			3000			3062		
Fielding		128			161			304			311		
Acceptance Testing T otal Hardware		2311 44273			3058 94976			3584 6888			3664 7037		
Engineering Support Project Mgt Admin Production Engineering Support Total Engineering Support		2706 3761 6467			5069 5924 10993			2908 5166 8074			2956 4658 7614		-
Non-Recurring Disposal of Tooling/Test Equipment					1999		<u>. </u>				2277		
Cost Reduction Program Rate Tooling/Test Equipment Total Non-Recurring					1999			-			2277		
Total Flyaway		50740	<u></u>		107968			14962			16928		
Peculiar Support Equipment Environmental Protection Covers Total Peculiar Support Equipment										T			
Gross P-1 End Item Cost Less PY Ady Proc		50740			107968			14962			16928		
Net P-1 Full Funding Plus CY Adv Procurement Other Non P-1 Costs Initial Spares Mods		50740			107968			14962			16928		
Total		50740			107968			14962			16928		

Procuremen	and Planning
Exhibit P-5A	History a

	BUDGET PRO	BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	PLANNIN	4G EXHIBIT (P-5A)					DATE Fet	February 1997	
B. APPROPRIATION	B. APPROPRIATION / BUDGET ACTIVITY				ľ	2. P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	3E			
		MISSILE PROCUREMENT / 2 / Other Missiles				_	ASER HELLFI	LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)	HW/HFII) (C	(20100)	
	LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	ΩTY Each	UNIT COST \$000	SPECS AVAIL NOW	SPEC (F REV REQ'D	IF YES W/A
FY 96		HELLFIRE Systems, Limited Liability Company (HSLLC) Orlando, FI		MICOM	Jan-96	96-Inc	750	46	Yes	S S	}
FY 97		HELLFIRE Systems, Limited Liability Company (HSLLC) Orlando, Fl	4 4 *	МІСОМ	Jan-97	Мау-99	1800	46	Yes	<u>8</u>	
							- Committee of the Comm				
REMARKS:	* A competition was conducted between the Martin Marietta Technologies, Inc. and Rockwell International Corp. for HELLFIRE II development with firm-fixed-price not to exceed production options for FY 93-96. The development contract (with FY 93-96 production options) was awarded to Martin Marietta Technologies, Inc. after Rockwell, Int. chose not to bid.	In the Martin Marietta Technologies, In evelopment contract (with FY 93-96.)	nc. and Rock	kwell International Corp. for Hoptions) was awarded to Marl	IELLFIRE I	developm Technolo	nent with fin gies, Inc. at	m-fixed-price r	not to ex Int. cho	ceed se not to	biď.
	** An additional ontion for FV 97 was a	dded to the current production contra	act in Oct. S	ንጉ							

** An additional option for FY 97 was added to the current production contract in Oct. 95.

EV 98 / 99 BIIDGET PRODICTION SCHEDIII E		CTION	AH C	<u> </u>			P-1 IT	EM NO	MENO	P-1 ITEM NOMENCLATURE LASEI	ZER H	ELLFI	rure Laser Hellfire MSL (Basic/IHW/HFII) (C70100)	L (BAS	C/H	WHF!) (C70	100			Ճ	DATE		ŭ	February 1997	199				
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P-40R	Sheet
Exhibit	ustification
	Item J
	Budget

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	a	JDGET ITER	BUDGET ITEM JUSTIFICATION SHEET	ATION SHE				February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY	VITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	iles					LONGBOW HELLFIRE (C70300)	LFIRE (C70300)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY		352	1005	1465	2000	2030	2020	2020	2060		12952
COST (in millions)	41.2	185.2	249.3	264.7	328.5	287.3	298.6	249.9	210.7		2115.4
Initial Spares (in millions)											
Total (in millions)	41.2	185.2	249.3	264.7	328.5	287.3	298.6	249.9	210.7		2115.4
Unit Cost (in millions)		0.53	0.25	0.18	0.16	0.14	0.15	0.12	0.10		0.16
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Description:

Longbow Apache to operate in adverse weather and dramatically increases the aircraft's survivability. Further, the Longbow HELLFIRE missile provides a lock-on-before-launch (LOBL) or lock-on-after-launch (LOAL) capability depending on target range and movement parameters. Longbow does not change the AH-64 mission or role, but provides for increased mission effectiveness by enhancing lethality and survivability. The production buys support training, fielding and deployment of the AH-64D Longbow Helicopter. All three Longbow programs elements (Fire Control Radar, D Model Apache Helicopter and provide the capability to conduct battle both day and night in adverse weather and with battlefield obscurants present. With its radio frequency guidance Longbow HELLFIRE Missile) were developed simultaneously and are scheduled to be fielded as a total system. Long Lead Items procurement in FY 95 provided for the procurement of materials for the first Low Rate Initial Production year (FY 96). This is required to meet system fielding requirements. substantially enhance survivability of the AH-64D Longbow Apache Helicopter. Longbow HELLFIRE uses a radio frequency guidance section. It will section, the Longbow HELLFIRE complements the semi-active Laser HELLFIRE II with a true fire and forget capability, maximizing the ability of the Longbow HELLFIRE is the air-to-ground missile system component of the Longbow system. It is designed to defeat individual targets and aser HELLFIRE and Longbow HELLFIRE are complementary. Both are required on the modern battlefield.

Missiles Cost Elements Dost Elements Plyaway Costs All-Up-Rounds Containers Containers GFE Explosives Engineering Services Engineering Change Orders Fielding Acceptance Testing Acceptance Testing Total Hardware Engineering Support Project Mgt Admin Production Engineering Support Total Engineering Support Potal Engineering Support Dostal Engineering Support Total Engineering Support Total Engineering Support			UnitCost	1 20 1 1 2	FY 97			EV 08	Com	Company		
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Gross P-1 End Item Cost	185214			249286			264725			328505		
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	185214			249286			264725			328505		

) Cad Tabulia	BIDGET BEOCHBEMENT HISTORY AND	ANNIA IO	DON AND PLANNING EXHIBIT (P-5A)					DATE	February 1997	- 24
R APPROPRIATIO	B APPROPRIATION / BUDGET ACTIVITY				ľ	. P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	· ·			
		MISSILE PROCUREMENT / 2 / Other Missiles					LONG	LONGBOW HELLFIRE (C70300)			
	LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$000	SPECS AVAIL NOW	SPEC IF REV REQ'D	F YES W/A
FY 96		Longbow Limited Liability Company (LLLC) Orlando, Fl		місом	Jan-96	Mar-97	352	378	Yes	Yes	*
FY 97		Longbow Limited Liability Company (LLLC) Orlando, Fi	П	МІСОМ	Jan-97	Jun-98	****1056	202	Yes	Xex	‡
FY 98		Longbow Limited Liability Company (LLC) Orlando, Fl	G TH	MICOM	Dec-97	96-unf	1465	157	Yes	Yes	‡
FY 99		Longbow Limited Liability Company (LLLC) Orlando, Fl	FF P**	MICOM	Dec-98	Jun-00	2000	150	Yes	Yes	*
REMARKS:	*System and development specifications are under government control, but the technical data package is not. **In the Longbow HELLFIRE's transition to production, performance based specifications will be baselined and used in all production contracts. ***Planned five year multiyear contract. ****Reflects actual contract quantity which is higher than FYDP. Program savings reinvested to buy additional missiles in accordance with the Cost Reduction Plan (1056).	Is are under government control, but is are under government control, but in to production, performance based solich is higher than FYDP. Program so	the technica pecification savings rein	al data package is not. Is will be baselined and used invested to buy additional missi	in all produ	ction contr	acts. th the Cost	Reduction Pla	n (1056)		

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	ă	BUDGET ITEM		JUSTIFICATION SHEET	ᆵ			February 1997	7 1997		
APPROPRIATION / BUDGET ACTIVITY	VITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	iles				JAVEL	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	EM SUMMARY (CC	(20007)	
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY	1575	1010	1020	1080	3316	5458	5403	7037		701	26600
COST (in millions)	437.0	200.9	161.3	143.1	326.6	466.0	409.5	475.9	7.1	95.3	2722.6
Initial Spares (in millions)					4.2	4.8	6.9	8.6	9.5	9.4	43.4
Total (in millions)	437.0	200.9	161.3	143.1	330.8	470.8	416.4	484.5	16.6	104.7	2766.0
Unit Cost (in millions)	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1		0.1	0.1

This project provides procurement funds for JAVELIN, the medium antitank system for infantry, scouts, and combat engineers. These battlefield obscurant conditions. The system's soft launch permits firing from a fighting position or from an enclosure. The JAVELIN is hardened against vehicles, rail, ship and air. This system has a high kill rate against all known armor threats at extended ranges under day/night, adverse weather and manportable antitank system for use in all forms of maneuver operations. It can be delivered by individual paratrooper, door bundle, tracked/wheeled forces must have the capability to defeat numerically superior armored forces. The JAVELIN, a replacement for the DRAGON, is a medium range, countermeasures and does not require extensive training for effective employment. DESCRIPTION:

The Command Launch Unit (CLU) is reusable and consists of a target acquisition device, Built-In-Test (BIT), a trigger mechanism, and appropriate interfaces The round includes a missile encased in a disposable launch tube assembly. Attached to the launch tube are CLU mating connector, front and rear shock attenuators, removable front end cap, as well as a replaceable battery coolant unit (BCU), and adjustable and replaceable shoulder strap, and a replaceable desiccant.

have a secondary mission of destroying bunkers and will provide defensive capability against hovering helicopters. The CLU can be used in a stand-alone DRAGON with a day/night integrated sight, capable of target acquisition in adverse weather and through battlefield obscurant conditions. This system will JUSTIFICATION: The operational concept envisioned for fighting the antiarmor battle requires an effective, extended range, manportable, fire-and-forget, fighting position or to reload. The JAVELIN provides enhanced lethality over the DRAGON through the use of a tandem warhead which will defeat all weapon for dismounted combat forces. JAVELIN's fire-and-forget technology allows the gunner to fire and immediately take cover, move to another known armor threats. It is effective against stationary and moving targets. The JAVELIN is capable of operating at twice the range (2000m) of the mode for battlefield survelliance and target selection. There were 3605 rounds procured through FY1997. Another 1080 are scheduled for procurement in FY1998 under the second year award of a three-year multivear contract. The remaining 21,915 are planned for purchase in subsequent years. The Marine Corps is also procuring the Javelin. Exhibit P-40R

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A. APPN / BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2		TotalCost	000\$	101918	14272	1325	840	568 138964	7000	9513	16481	1458 156903	20172	2614	3967	266 335 62		6310	3209	10393	200858	200858			200858	•
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Missiles Cost Analysis	Missiles	Cost Elements		Missile Hardware- Recurring All Up Round	Engineering Services	Engineering Change Orders Contractor Prod Engineering Support	Acceptance Testing	Freiding Subtotal Missile Hardware	Procurement Support	Government Project ingt Admin Government Production Engineering Admin	Subtotal Support Cost	Non-Hecurring Production Total Missile Flyaway	Command & Launch Hardware Command Launch Unit	Engineering Services Engineering Change Orders	Contractor Prod Engineering Support Fielding	Non-Recurring Production Total CLU Flyaway	Training Devices	Field Tactical Trainer - Student Station Field Tactical Trainer - Instructor Station	Basic Skills Trainer Missile Simulation Round	SubTotal Support Cost	Gross P-1 End Cost	Net P-1 Full Funding Cost PLUS P-1 CV Adv. Proc	Other Non P-1 Costs Initial Spares	MODS	ТОТАL	

Ogo Tasonia	BIDGET BROCHBEMENT HISTORY AND PLANNING EXHIBIT (P-5A)	DI ANNIN	IG EXHIBIT (P-5A)				<u> </u>	DATE	February 1997	
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B. APPROPRIATION / BUDGET ACTIVITY MISSILE F	MISSILE PROCUREMENT / 2 / Other Missiles			,	ı,	AVELIN (AAWS	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	AMARY (C	(2000;	
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD	CONTRACTED BY	AWARD DATE	DATE OF FIRST	ΩTY	NNIT COST	SPECS AVAIL NOW	SPEC REV BEO'D	IF YES W/A
All Up Round FY 96 FY 98 FY 99 Command Launch Unit FY 96 FY 98 FY 99	Joint Venture TI/MM* Joint Venture TI/MM* Joint Venture TI/MM* Joint Venture TI/MM* Joint Venture TI/MM* Joint Venture TI/MM*	SS/FFP SS	MICOM MICOM MICOM MICOM MICOM MICOM	Feb-96 May-97 Dec-97 Dec-97 Dec-97 Dec-98	Nov-98 Oct-00 Oct-01 Oct-01	1010 1020 1080 3316 270 423	101 1187 1189 89 89 89			
REMARKS: * Lewisville TX; Orlando, FL									1	

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FY 98 / 99 BUDGET PRODUCTION SCHEDULE	DUCTIO	N SC	HEDUL	ш				3	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	(AAWS	M) SYS	TEM S	UMMA	3√ (CC	(2000)			<u> </u>	1		Februs	February 1997	7		
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	Simn	lator and Ti	raining Dev	Simulator and Training Device Justification	ation			Februa	February 1997
Appropriation / P-1 Line Item	e Item		Weapon System (if applicable)	icable)		Equipment Nomenclature			PE
MISSILE PROCUREM	MISSILE PROCUREMENT/JAVELIN (AAWS-M) SYSTEM SUMMARY	SYSTEM SUMMARY	Javelin (AA	Javelin (AAWS-M) Training Devices (H06300)	; (H06300)	See Traini	See Training System Description Paragraph	aragraph	
Fin Plan	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	Total
Quantity									
(Each)									
Proc	26621	16522	4711	16340	29926	25678	27765		147563
(\$000)									
RDT&E									
(\$000)									
O&S									
(\$000)									

TRAINING SYSTEM DESCRIPTION:

- 1. Field Tactical Trainer (FTT) Student Station This item will be used to teach force-on-force tactics and practice tasks to prepare for the U.S. Army Training Evaluation Program (ARTEP) and U.S. Marine Corps Readiness Evaluation System.
- basic individual skills required to operate the JAVELIN and for qualification training. The device will be used by the active U.S. Army and the 2. The FTT Instructor Station - This item will be used in a traditional outdoor range environment at the institution and unit level to refine the U.S. Marine Corps.
- 3. Basic Skills Trainer (BST) This item is used for development and retention of tactical and technical gunnery skills. Training will be conducted in both the institution and unit level. The training device will be used by the active U.S. Army and the U.S. Marine Corps.
- 4. Missile Simulation Round (MSR) This item is a three-dimensional full-size replica, nonoperational mock-up of the JAVELIN tactical round. procedures with the CLU. Additionally, it will be used in field handling and mobilization tactical deployment exercises. The device will be used It is capable of attachment to a tactical Command Launch Unit (CLU). It will be used to practice handling, and assembly/disassembly by the active U.S. Army and the U.S. Marine Corps.

Simulat	Simulator and Training	Device.	Device Justification (Page 2)	tion (Pa	ge 2)					Date Fet	February 1997	-26
Appropriation / P-1 Line Item		Weapon System (if applicable)	(if applicable)			IOC Date	Equipmen	Equipment Nomenclature				PE
MISSILE PROCUREMENT/JAVELIN (AAWS-M) SYSTEM SUMMARY	SYSTEM SUMMARY	AVELIN (A	AVELIN (AAWS-M) Training Devices	Devices				See Training System Description Paragraph	item Desci	ription Paragraph		
		joc	Ready	Avg	Pric	Prior Years	FY	r 1997	FΥ	Y 1998	FΥ	7 1999
Training Device By Type	Site	Date	For Tng Date	Student Thruput	Ωty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
					Each	\$000	Each	\$000	Each	000\$	Each	000\$
FTT Student Station	Ft Benning	Apr-96	May-96	12	126	18946	129	13283	39	3293	180	12332
FTT Instructor Station	Ft Benning	Apr-96	May-96	12	36	1564	13	281	10	174	33	665
Basic Skills Trainer	Ft Benning	Aug-96	96-deS	12	23	5383	15	2545	8	1084	24	2708
Missile Simulation Round	Ft Benning	Oct-95	Nov 95	12	228	728	174	413	80	160	333	635
									•			
Total						26621		16522		4711		16340

December Part Par	Simu	ulator	Simulator and Training Device Justification (Page 3)	ng De	vice Justil	ficatio	n (Page 3	~			DATE	February 1997	
be used to teach force-on-force be used to teach force-on-force be used to teach force-on-force Prior Years Plan	ype						Weapon System (if a Javelin (AAWS-M)	applicable) Weapon Syst	9 m				1
Prior Years	Description / Justification This item will be used to Corps Readiness Evalua	teach fo	orce-on-force stem.		and practice	tasks to	o prepare for	the U.S	3. Army Eval	uation I	Programs an	d the U.	S. Marine
Plan Qty Cost Qty Qty Cost Qty Qty Cost	i.	Pric	or Years	Ē	/ 1997	Ĺ	1998	Ē	, 1999	Cost	Cost To Complete	To	Total Cost
Support 126 18946 129 113283 39 3293 180 12332	rinancial Plan	Qty	Cost	Q _t	Cost	Q.	Cost	Qţ	Cost	QtA	Cost	Qty	Cost
Support 126 13901 129 11353 39 2582 180 11195 126 2022 326 264 295 2022 326 204 419 716 295 326 180 113283 39 3293 180 12332 0rt Costs		Each	000\$	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000
Support 153 125 28 126 295 202 295 326 264 295 326 295 326 295 326 295 326 326 326 326 326 326 326 326 326 326	HARDWARE COSTS Device (hardware)	126		100	11953	30	0830	081	11105	4070	2002		09056
Support 2022 326 264 295 Support 2870 1479 419 716 ware Costs 126 18946 129 13283 39 3293 180 12332	Engineering Change Order	24		2	125	3	282	3	126	2			90930
Support 2870 1479 419 716 ware Costs 126 18946 129 13283 39 3293 180 12332 ort Costs	Nonrecurring		2022		326		264		295		1029		3936
ware Costs 126 18946 129 13283 39 3293 180 12332	Production Eng Support		2870		1479		419		716		3050		8534
ware Costs 126 18946 129 13283 39 3293 180 12332 ort Costs													
ort Costs 126 18946 129 13283 39 3293 180 12332													
ort Costs	SubTotal Hardware Costs	126		129	13283	30	3293	180	12332	1070	64064	1544	111918
ort Costs													
ort Costs								2					
ort Costs													
	SubTotal Support Costs		· · · · ·										
18946	TOTAL COSTS		18946		13283		3293		12332		64064		111918

BUDGET ITEM JUSTIFICATION SHEET February 1997	MISSILE PROCUREMENT /Other Missiles	FY 1997 FY 1998 FY 2000 FY 2001 FY 2002 FY 2
P-1 ITEM NOMENCLATURE 7 FY 1998 FY 2000	FY 1998 FY 2000 FY 2001 FY 2002	

COST (in millions) QUANTITY

PPROPRIATION / BUDGET ACTIVIT

defeat numerically superior armored forces. The JAVELIN, a replacement for the DRAGON, is a medium range, manportable antitank system for use system has a high kill rate against all known armor threats at extended ranges under day/night, adverse weather and battlefield obscurant conditions. multiyear procurement. JAVELIN is a medium antitank system for infantry, scouts, and combat engineers. These forces must have the capability to The system's soft launch permits firing from a fighting position or from an enclosure. The JAVELIN is hardened against countermeasures and does in all forms of maneuver operations. It can be delivered by individual paratrooper, door bundle, tracked/wheeled vehicles, rail, ship and air. This These advance procurement funds will provide economic order quantities for year two and year three of the Javelin three-year not require extensive training for effective employment. DESCRIPTION:

WEAPON SYS	TEM ADVANCE	WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10a)	EXHIBIT (P-10a		CURRENT YEAR FOR FISCAL YEAR PROGRAM	SAL YEAR PROGRAM	
MOS)	PARISON OF R	COMPABISON OF BEOLIFST TO EXECUTION	, WOILION			1997	
	(TOA, Dolla	(TOA, Dollars in Thousands)	(1010)		DATE	February 1997	
Weapon System Type (Model/Series No.)		FIRST SYSTEM AWARD DATE	ATE	FIRST SYSTEM COMPLETION DATE	ION DATE	INTERVAL BETWEEN	
JAVELIN (AAWS-M) (ADV PROC) (CC0007)	(CC0007)	May 1997		August 2000		SYSTEM COMPLETIONS (MONTHS)	10
Advance Procurement / Advance Funding Items Requested / Actual	Quantity	Date Contract Award Required / Actual	Date Delivery of First Equipment Required / Actual	Production Lead Time in Months Total Requested (Adm/Prod) Actual (Adm/Prod)	Total Cost Requested	Actual Contract Cost	5
(1)	(2)	(3)	(4)	(5)	(9)	(2)	
1. CFE							
2. GFE (Specify)							
3. SUBTOTAL						,	
4. EOQ (MYP)	4396	Dec-97	Dec-98	24	34000		34000
5. (CFE)							
6. (GFE) (Specify)							
7. SUBTOTAL					34000		34000
8. Design							
9. Other (Indicate Specific Items)							
10. TOTAL					34000		34000
							
NARRATIVE DESCRIPTION	24,4		(0007)		1 1 2 10007 5	-	

These funds will procure economic order quantities for Javelin all up round (4396); command launch unit (693); field tactical trainer, student station (219); field tactical trainer, instructor station (49); and basic skills trainer (32). These funds will be awarded on year one of the Javelin three-year multiyear contract. The multiyear contract will be awarded May 97 with an option for year two to be awarded in Dec 97 and option two for year three in Dec 98.

P-40R	Sheet
Exhibit	ustification
	Item J
	Budget

							DATE				
	BUD	GET ITEM	BUDGET ITEM JUSTIFICATION SHEET	TION SHEE	h			February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE	LATURE					
MISSILE	E PROCUREME	MISSILE PROCUREMENT /Other Missiles	SB					TOW 2 SYSTEM SI	TOW 2 SYSTEM SUMMARY (C59300)	•	
Prior	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	otal Program
QUANTITY 144	144783										144783
illions)	2256.2	9.7	13.6	1.3	0.0	0.0	0.0	0.0	0.0		2280.8
Illions)	20.2										20.2
L	2276.4	9.7	13.6	1.3							2301.0
ons)	0.016										0.016

System requirement for Close Combat Maneuver Forces. TOW is used primarily to destroy formations of armored vehicles, but is also an effective assault weapon against vehicles, field fortifications, and emplacements. TOW was a part of a combined united nations interagency force in Somalia and may be Cobra. TOW is designated as the point target weapon on selected helicopters. TOW 2 has two distinct improvements, increase performance/hardening and a 6" full caliber warhead. TOW 2A added a small shaped tip of the TOW 2 probe to counter reactive armor, TOW 2B is an improvement to TOW 2 used against other regional threats. TOW can be fired from a ground tripod or from specifically adapted vehicles, e.g., ITV, Bradley, HMMWV, and DESCRIPTION: TOW (Tube-Launched, Optically-Tracked, Wire-Guided Missile System) is designed to fulfill, the Heavy Antitank Assault Weapon lethality based on a new warhead, fuze, and software to obtain a fly-over-shoot-down missile.

JUSTIFICATION: FY 98 funding is required to complete plant transition/closure.

Missiles			1000		MISSILE PROCUREMENT / 2 / Other Missiles	₹ O	2 SYSTEM SU	TOW 2 SYSTEM SUMMARY (C59300)	300)			Febr	February 1997
			FY 96			FY 97			FY 98			FV 99	
nts co		TotalCost	ð Ş	UnitCost	TotalCost	ğ	UnitCost	TotalCost	Qf	UnitCost	TotalCost	Qfy.	UnitCost
	8	H	Each	\$000	\$000	Each	\$000	\$000	Each	000\$	\$000	Each	\$000
Missile Hardware- Recurring Missile Contract GFE													
Engineering Change Orders (Value Engineering)													
SUBTOTAL MISSILE HARDWARE													
Non-Recurring Costs Capstan Block Plant Transition/Closure		5000 1650			4600 5868			1029					
SUBTOTAL NONRECURRING COST		6650			10468			1029					
PROCUREMENT SUPPORT-RECURRING Contractor Engineering Production Engineering		1775			1767			150					
Government Test Project Management Admin Fielding		1113			1261			147					
SUBTOTAL		2996			3103			297					
Total Flyaway		9646			13571			1326		 ,			
Support Cost Peculiar Support Equipment Launcher (N/S) Training Device (B/S) DMPE Froineering Change Orders													
Other (Specify) FDT		40											
SUBTOTAL SUPPORT COST		40							·				
Gross P-1 End Cost Less: Prior Year Adv Proc		9896			13571		·	1326	·				
Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc.		9896			13571			1326					
Other Non P-1 Costs Initial Spares MODS		40728			2311	···		5717 62755			5821 63774		
TOTAL		50414			15898			69798			69595		

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B. APHOPHIATION / BUDGET ACTIVITY MISSILE P	MISSILE PROCUREMENT / 2 / Other Missiles					TOW2	TEM SUMMAR	4Y (C5930	6	
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$000	SPECS AVAIL NOW	SPEC II REV II	F YES W/A
FY 1996	Hughes Aircraft Tucson, AZ	SS/FFP MICOM	MICOM	Aug-96	N/A	N/A	N/A	N/A	N/A	
FY 1997 Support & Plant Transition/Closure	Hughes Aircraft Tucson, AZ	TBD	MICOM	76-unf	A N	NA	N/A	N/A	N/A	
FY 1998 Complete Plant Transition/Closure	Hughes Aircraft Tucson, AZ	TBD	MICOM	TBD	N/A	N/A	N/A	N/A A/	N/A	
REMARKS:	-									

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	Õ	BUDGET ITEM JU	A JUSTIFICA	STIFICATION SHEET	<u> </u>			February 1997	y 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT ARMY/Activity 2	iy 2					MLRS ROCKET (C65400)	ET (C65400)		-
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY	478398	1326	1674	0	534	929	240	826	1290		485016
COST (in millions)	3569.7	44.6	41.4	2.9	19.0	19.9	19.8	54.0	62.6		3833.9
Initial Spares (in millions)											
Total (in millions)	3569.7	44.6	41.4	2.9	19.0	19.9	19.8	54.0	62.6		3833.9
Unit Cost (in millions)	0.01	0.03	0.02		0.04	0.03	0.08	90.0	0.05		0.01
aine bedeutscheit ein de deiden under entsche eine General (2018) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1	, נמדי	Maritim !	Starlead day	(1 / A)	Children (C	to dealers and	oidur yddago	Ladin a al d	ing bodomio	

stabilized, free flight rocket. Major assemblies of the rocket are a fuzed warhead, a rocket motor, four fins, a fin opening/restraint device, and four sabots. capability of the existing MLRS by providing improvements in range, accuracy and effectiveness, and maneuver force safety (improved submunitions with DESCRIPTION: The Extended Range (ER) Multiple Launch Rocket System (MLRS) includes the rocket assembly which is a tube-launched, spin The rocket is packaged in a six rocket pod and can be fired one at a time or in ripples of two to six. The ER-MLRS rocket will enhance the self destruct fuzes).

increased range gives positioning flexibility and improves lateral ranging of targets on tomorrow's wider battlefronts. Operation Desert Storm identified the need for increased range to defeat long range targets. ER-MLRS will accomplish this mission. JUSTIFICATION: The objective of the system provides counterfire and suppression of enemy air defenses, light materiel, and personnel targets. The

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT A	T ACTIVITY PROCURE	4/BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT ARMY/Activity 2	'Activity 2	B. WEAPON MLRS EXT	TENDED RAN	B. WEAPON MLRS EXTENDED RANGE ROCKET (C65402)		C. MANUFACTURER NAME		D. DATE February 1997	TE February 1997
Missiles	9		EV 96			EV 07			EV 00			20 22	
Cost Elements	CD	TotalCost	Αφ	UnitCost	TotalCost	ĝ	UnitCost	TotalCost	έσ	UnitCost	TotalCost	Oty Oty	UnitCost
		\$Million	Each	ક્ક	\$Million	Each	\$	\$Million	Each	\$	\$Million	Each	υ
FLY-AWAY COSTS					***************************************								
HARDWARE													
Tactical Round (Less GFE) M85 Submunition		25.669	1326	19358	28.865	1500	19243	0.000	00		11.628	534	21775
Engineering Services Engineering Change Orders		8.777 0.740			2.426		!	0.000	•		2.508 0.190		
Fielding					0.000			0.063			0.062		
SUBTOTAL		43.395			40.056			0.981			17.251		
PROCUREMENT SUPPORT													
Project Management Admin		0.618			1.240			1.277			1.315		
Test & Evaluation Service Support Contract		0.489	•		0.000			0.495			0.276		
SIIBTOTAI									<u> </u>				
		212.1			1.348			1.882			1.704		
TOTAL		44.607			41.404			2.863			18.955		
									-				
10000													
GHOSS F-1 END COSI LESS: PRIOR YR ADV. PROC.		44.607			41.404			2.863			18.955		
NET P-1 FULL FUNDING COST		44.607			41.404			2.863			18.955		
PLUS CURRENT YEAR ADV. PROC.													
OTHER NON P-1 WEAPON SYSTEM COSTS INITIAL SPARES MODS													
TOTAL		44.607			41.404			2.863			18.955		
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	BUDGET PRO(BUDGET PROCUREMENT HISTORY AND F	PLANNIN	ORY AND PLANNING EXHIBIT (P-5A)					Feb	February 1997	
B. APPROPRIATIC	B. APPROPRIATION / BUDGET ACTIVITY					C. P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	RE			
	MISSIFE	MISSILE PROCUREMENT ARMY/Activity 2					MLRSEXIE	MLRS EXTENDED HANGE ROCKET (C85402)	CKEI (C65	02)	1
	LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST	SPECS AVAIL NOW	SPEC IF Y REV REQ'D	F YES W/A
Tactical Roun FY 94 & Prior FY 96 FY 99	Tactical Round (Less GFE)/ER-MLRS FY 94 & Prior FY 97* FY 99	Lockheed Martin Vought Sys, Dallas, TX Lockheed Martin Vought Sys, Dallas, TX Lockheed Martin Vought Sys, Dallas, TX		PEO-Tactical Missiles/MICOM PEO-Tactical Missiles/MICOM PEO-Tactical Missiles/MICOM APEO-Tactical Missiles/MICOM	Aug-96 Feb-97 Dec-98	Jan-98 May-98 May-00	1326 1500 534	19258 19243 21775	S	<i>운 운 운</i>	
REMARKS:	NO TACTICAL ROCKETS PROCURED IN FY 95. * Quantity differs from FYDP to reflect best current estimate.	IN FY 95. sest current estimate.									

							P-1 ITE	ON W	MENCI	P-1 ITEM NOMENCLATURE	ш										△	DATE							
ET 98 / 89 BUDGET PRODUCTION SCHEDULE	좕	JCTION	SCH					١		2	MLRS EXTENDED RANGE ROCKET (C65402)	XTEN	SED F	ANG	BOC	KET (26540	6	١	1	┥	Į	ŀ	ŭ,	February 1997	y 1997		Ì	
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Lockheed Martin Vour	ł	5000			Ī	12			DECIDENCE				۰	Ť		۰,	t		و ۽	$^{+}$	"	2 8	Т		i				
2 Lockheed Martin Vought Systems, Dallas, TX	╁	2000				12		Z	INITIAL	إ				T		٠	t	l	0	+	V		T T	EDUC	REDUCED RANGE PRACTICE	ANGE	PRAC	TICE	
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Exhibit P-21 Production Schedule

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FY 98 / 99 BUDGET PRODUCTION SCHEDUL	ODUCT	S NOI	CHED	ULE					¥	MLRS EXTENDED RANGE ROCKET (C65402)	ENDED	RANGE	ROCK	ET (C6!	5402)			4		٦	February 1997	y 1997		ł	
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	ត	BUDGET ITEN		JUSTIFICATION SHEET	h.			February 1997	y 1997		
T ACT	ACTIVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCURE	MISSILE PROCUREMENT ARMY/ACIVI	ılıy 2					MLRS LAUNCI	MLRS LAUNCHER (C65900)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Progran	Total Progran
	754			53	32	59	64	85	88		1126
	1898.3	81.1	103.7	102.6	92.5	158.3	208.7	216.9	230.7		3092.8
(Suo	153.9	5.1		1.0	7.1	8.6	16.5	23.2	27.3		242.6
1	2052.2	86.2	103.7	103.6	93.6	166.9	225.2	240.0	258.0		3335.4
_ [2.7			3.6	3.1	2.8	2.9	2.8	2.9		3.0

nitial Spares (in millio

COST (in millions)

QUANTITY

PROPRIATION / BUDGE

Jnit Cost (in millions)

otal (in millions)

Understanding, signed July 1979, with France, Germany and the United Kingdom; Italy was added in July 1982. FY 96 and FY 97 program support funds electronics providing increased processing capability, an embedded global positioning system for future munitions and improved fault isolation for ease of remanufactured launchers for the South Carolina, Arkansas and South Dakota NG. Initial Spares to support launcher remanufacture in FY 96 and FY 97 DESCRIPTION: The Multiple Launch Rocket System (MLRS) provides a high volume of fire power in a very short timeframe. Operationally, the concept is designed for the mobility, flexibility, and range requirements of the modern battlefield. Mounted on a derivative of the Bradley Fighting Vehicle (BFV), the 12-round launcher/loader requires a crew of three personnel to conduct launching missions. The design range in excess of 30 kilometers will allow are included in the total procurement cost. FY 98 and out quantities are for M270A1 upgrades. FY 98-03 funding also includes five batteries of rebuilt launcher maintenance. The ILMS will allow faster target engagement on time sensitive, short dwell time targets and greatly reduces time on the firing Mechanical System (ILMS) will be procured and become part of the M270A1 upgrade. The IFCS is a modification to the current Fire Control System point and reload operations in order to improve the survivability of the crew and the launcher. MLRS was jointly developed under a Memorandum of coverage of 90 percent of the targets available at that range. Starting in FY 98 an Improved Fire Control System (IFCS) and an Improved Launcher which provides the interface with the Fire Direction Center, the Munitions Controls and the MLRS Launcher. The IFCS will upgrade the system's are required for previously fielded launchers and to field launchers procured in FY 93, FY 94 and FY 95. FY 96 and FY 97 funds provide for launchers for deployment to MLRS Heavy Divisions.

operations, mitigates electronic hardware obsolescence and reduces O&S costs. The ILMS decreases stow to aim point timeline, enhances effectiveness JUSTIFICATION: The objectives of the system are counterfire and suppression of enemy air defenses, light materiel, and personnel targets. The system is designed for adaptation to other warheads such as scatterable mines, terminally guided munitions, and other smart munitions. MLRS is the Army's rocket launch platform for the next decade. The IFCS provides faster response times for high priority targets, enhances survivability, supports attack in engaging and supporting the force, and increases MLRS platform survivability.

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT AI	T ACTIVITY PROCUR	N/BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT ARMY/Activity 2		B. WEAPON	N MLRS LAUNCHER (C65900)	(ER (C65900)	<u> </u>	C. MANUFACTÜRER NAME		D. DATE Febru	TE February 1997
Missiles	9		EV 96			EV 07	ľ		EV 00			200	
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Launcher		11.144	53	384286	13.450	32	384286	42.310	21	2014762	55.672	32	1739750
Carrier (GFE)		1 401	29	160552	7.069	32	201971	787	ç	40076	5.664	35	177000
2X9 Launcher		?	3	50.03	22.145	2	7007	25.035	‡ 7	0.601	0.7.0	\$	8 7 1
Peculiar Support Equipment Engineering Services		23.056			18.285			, i	<u> </u>		0		
Engineering Change Orders		0.068			0.100			1.505			0.823		
Fielding		8.290	-		7.002			0.000			3.315		
SUBTOTAL		70.991			94.372			94.920			84.435		
PROCUREMENT SUPPORT													
Project Management Admin		9.213			8.439	·		6.215			6.462		
Service Support Contract		0.889			0.892			1.514			1.560		
SUBTOTAL		10.102		•	9.331			7.729			8.022		
						·							
TOTAL		81.093			103.703			102.649			92.457		
											•		
GROSS P-1 END COST LESS: PRIOR YR ADV. PROC.		81.093			103.703			102.649			92.457	· · · · · · · · · · · · · · · · · · ·	
NET P-1 FULL FUNDING COST		81.093			103.703			102.649			92.457		
PLUS CURRENT YEAR ADV. PROC													· .
OTHER NON P-1 WEAPON SYSTEM COSTS		5 077			000		-	000			1		
MODS MOD SPARES		27.475			6.410			2.188	-		2.239	<u>-</u>	
TOTAL		108 780			21E 6AE			200 475			000		
		50.05			213.043			209.473	1		184.660		

BUDGET PRO	BUDGET PROCUREMENT HISTORY AND	PLANNIN	ORY AND PLANNING EXHIBIT (P-5A)					DATE Fe	February 1997	97
B. APPROPRIATION / BUDGET ACTIVITY					C, P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	RE			
MISSILE	MISSILE PROCUREMENT ARMY/Activity 2					MIL	MLRS LAUNCHER (C65900)	(200659		
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST	SPECS AVAIL NOW	SPEC IF REV REQ'D	IF YES W/A
Launcher M270 FY 95	Lockheed Martin Vought Sys, Dallas, TX		PEO-Tacticat Missiles/MICOM	Mar-95	Nov-96	20	1826400	Yes	^o Z	
Launcher Remanufacture FY 96 FY 97	Lockneed Martin Vought Sys, Dallas, TX Lockheed Martin Vought Sys, Dallas, TX	SS/FFP SS/FFP	PEO-Tactical Missiles/MICOM PEO-Tactical Missiles/MICOM	Aug-96 Nov-96	May-97 Nov-97	29 35	384286 384286	Yes	22	
Launcher M270A1 FY 98* FY 99	Lockheed Martin Vought Sys, Dallas, TX Lockheed Martin Vought Sys, Dallas, TX	SS/FFP SS/FFP	PEO-Tactical Missiles/MICOM PEO-Tactical Missiles/MICOM	Oct-97 Oct-98	Apr-00 Mar-01	21	2014762 1739750	Yes Yes	22	
PEMARKS: First deliveries of FY 96 remanufacture launchers		er Army D	by Red River Army Depot (RRAD) Oct 96; contract with Lockheed Martin Vought System delivers	Ontract w	ith Lock	Jeed Mar	tin Vought 8	Systen	delive	ıs

First deliveries of FY 96 remanutacture launchers by Hed HIVer Army Depot (HHAD) Oct 95; contract with Lo 20 launchers starting May 97.

* Quantity differs from the FYDP to reflect the current best estimate.

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FY 98 / 99 BUDGET PRODUCTION SCHEDULE	큠	CION	SCHE							Ī	ſ	MLR	MLRS LAUNCHER (C65900)	CHER	(065	ê	ŀ				_	I		Feb	February 1997	997	۱	ł	T
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Prior Years FY 1997 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003	MISSILE F	ROCUREMENT/MLRS L	AUNCHER		MLRS LAUNCHER		LAUNCH	HER MAINTENANCE TF	AAINER	C65900
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TRAINING SYSTEM DESCRIPTION:

The MLRS Launcher Maintenance Trainer is used by the Ordnance Missile and Munitions Center and School (OMMCS) to provide training in troubleshooting and maintenance procedures for the MOS 27M. The trainer consists of a classroom station to provide computer controlled troubleshooting simulations, a Launcher Loader Module (LLM) mockup to provide hands-on maintenance training (remove/replace) and an Electronics Repair Station to provide training in Automated Test Equipment (ATE) and off-launcher repair. Trainer density increases with M270A1 fielding requirements.

Simulate	Simulator and Training Device Justification (Page 2)	Device J	Justificat	ion (Pa	ge 2)					Date Feb	February 1997	,
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APPROPRIATION / BUDGET ACTIVITY	YIIV				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	lles				ARMY TAI	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)	TACMS) - SYS SUN	A (C98510)	
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY	1597	120	46	153	160	160	160				2447
COST (in millions)	1024.0	121.3	91.8	97.8	103.0	1001	111.6	13.8	0.0		1663.4
Initial Spares (in millions)	2.3		1.0	6.0							4.2
Total (in millions)	1026.3	121.3	92.8	98.7	103.0	100.1	111.6	13.8			1667.6
Unit Cost (in millions)	9.0	1.0	1.0	9.0	9.0	9.0	0.7				0.7

missile. The inherent GPS accuracies will be achievable independent of range. Army TACMS missiles are fired from the Multiple Launch Rocket System Army TACMS includes Guided Missile and Launching Assembly; Test Set, Guided Missile System; Training Set, Guided Missile System: M-165; Trainer, Test Device, Guided Missile: M70; Modified M270 Launcher; and the Army TACMS Missile Facilities. (MLRS) modified M270 launcher and are being deployed within the ammunition loads of corps MLRS battalions and/or division artillery MLRS batteries. materiel (APAM) warhead. The Army TACMS Block IA integrates global positioning system (GPS) components and increases the range of the Block I DESCRIPTION: The Army TACMS is a ground-launched missile system consisting of a surface-to-surface guided missile with an anti-personnel anti-

complexes. The Block IA missile will destroy high value targets at ranges approximately twice that of the current Block I. The Block IA will be especially JUSTIFICATION: The Army TACMS is air transportable and provides a deep fires missile system that operates in near all-weather conditions, day or night. It is used to attack tactical surface-to-surface missile sites, air defense missile sites, logistics elements and command/control/communications suited for destroying enemy surface-to-surface missile system launchers.

Missifes Cost Analysis		A. APPN / BUDGE MISSILE	ET ACTIVITY PROCURE	A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 2 / Other Missiles	er Missiles	B. WEAPON ARMY TAC	N ACTICAL MSI	. WEAPON ABMY TACTICAL MSI SVS (ATACMS) - SVS		C. MANUFACTURER NAME	MANUFACTURER NAME	D. DATE	TE Eshaion, 1007
missiles cost Alialysis	コ						SUM (C98510)	98510)	515-16	Luchileed iv.	Systems	ng.	ualy 1997
Missiles	<u>□</u>		FY 96			FY 97			FY 98			FY 99	
Cost Elements	СD	TotalCost	Oty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	δţ	UnitCost	TotalCost	Qţ	UnitCost
		000\$	Each	000\$	000\$	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Missile nardware- necurring Prime Contract GFE		76978	120	149	65290	97	673	87886	153	574	92080	160	576
Flight Kits Fingingering Services		378			1216			318			3100		
Engliseering Change Orders (ECOs)		1862			1094			827			9998 940		
Subtotal Missile Hardware		96428	-		142 82548			520 99656			270 1 05114		
Procurement Support Project Management Admin Production Engineering Support		5599			3906			4138			4246		
Test and Evaluation Subtotal Procurement Support		4546 17888			453/ 824 9267			5992 3668 13798			6288 3002 13536		
TOTAL MISSILE FLYAWAY		114316			91815			113454			118650		
Command & Launch Integration Command & Launch Integration Spt Subtotal C&L Integration		755 755					· · · · · · · · · · · · · · · · · · ·	1040 1040			1750 175 0		
Support Cost Missile Test Device ATMF Test and Support Equipment Subtotal Support Cost		2704 3528 6232											
Gross P-1 End Cost		121303			91815			114494			120400		
Less: Prior Year Adv Proc Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc.		121303	· · · · · · · · · · · · · · · · · · ·		91815 69000			16680 97814			17440 102960		
Initial Spares					696		;;; <u>;</u>	943					
TOTAL	· · · · · · · · · · · · · · · · · · ·	121303		10	161778			98757			102960		

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Missiles Cost Analysis	⋖	A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 2	T ACTIVITY PROCURE	PN BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2 / Other Missiles	ər Missiles	B. WEAPON	ATACMS BLK I (C98500)	K I (C98500)		C. MANUFACTURER NAME Lockheed Martin Vough Systems	==	D. DAIE Febr	rie February 1997
Alicoile ocile	₽		FY 96			FY 97			FY 98			FY 99	
nts	8	TotalCost	Ą	UnitCost	TotalCost	Qţŷ	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	000\$	Each	\$000	000\$	Each	000\$	000\$	Each	\$000
Missile Hardware- Recurring Prime Contract GFE		33200	90	664								-	
Flight Kits Engineering Services Engineering Change Orders (ECOs)		5850 791											
Subtotal Missile Hardware		39976											
Procurement Support Project Management Admin Production Engineering Support Test and Evaluation Subtotal Procurement Support		3845 5216 2733 1179 4											
TOTAL MISSILE FLYAWAY		51770											
Command & Launch Integration Command & Launch Integration Spt Subtotal C&L Integration													
Support Cost Missile Test Device ATMF Test and Support Equipment Subtotal Support Cost													
Gross P-1 End Cost Less: Prior Year Adv Proc Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc. Other Non P-1 Costs Initial Spares MODS		51770											
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Missiles Cost Elements Cost Elements Cost Elements CD Total \$500 Wissile Hardware- Recurring Prime Contract GFE Flight Kits Engineering Services Engineering Change Orders (ECOs) Fielding Subtotal Missile Hardware Spoots Subtourement Support	FY 96 TotalCost Qty \$000 Each 43778 70	l InitCost		FV 97			FY 98	Systems	Svstems	EV 00	
lements co Tota \$0 co		1 InitCost		FV 97			FY 98			ار 00 کا	
curring cp Tota \$0 curring Orders (ECOs)	TE TE	InitCost			1					F I 55	
curring Orders (ECOs)	78 Eac	Similar in	TotalCost	Oty C	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
Orders (ECOs)		\$000	000\$	Each	\$000	000\$	Each	\$000	000\$	Each	\$000
Orders (ECOs)	978	625	65290	26	673	87886	153	574	6	160	576
Orders (ECOs)	10781		1216			318 318 9977			128 3100 8666		
ardware	1071		1094	<u> </u>		827			870		
Procurement Support	56452		82548			9 3968			105114		
Admin ig Support ent Support	1754 2527 1813 6094		3906 4537 824 9267			4138 5992 3668 1 3798			4246 6288 3002 13536		
	62546		91815			113454			118650		
Command & Launch Integration Command & Launch Integration Spt Subtotal C&L Integration	755 755					1040 1040			1750 1750		
Support Cost Missile Test Device ATMF Test and Support Equipment Subtotal Support Cost	2704 3528 6232										
	69533		91815			114494	···		120400		
A Cost	69533		91815 69000			16680 97814		311	17440 102960		
Other Non P-1 Costs Initial Spares MODS			963			943					
TOTAL	69533		161778			98757			102960		

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		EM NOMENCLATURE ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)	UNIT COST \$000	664 625 673 574 576	
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		C. P-1 ITEM I	DATE OF FIRST DELIVERY	Mar-97 Aug-97 May-99 Mar-00	
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		B. APPROPRIATION / BUDGET ACTIVITY MISSILE P	LINE ITEM / FISCAL YEAR	Army TACMS Block I Missile FY 96 Army TACMS Block IA Missile FY 97 FY 98 FY 99	PEMARKS:

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	BUE	BUDGET ITEM JUST	TIFICATION SHEET	EET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	YTIVITY			P-1 ITEM NOMENCLATURE	E			
	MISSILE PROCUREMENT /Other Missiles	VT /Other Missiles			ARN	ARMY TACTICAL MSL SYS (ATACMS) - (ADV PROC) (C98510)	ACMS) - (ADV PROC) (C96	3510)
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	0.0	0.69	0.0	0.0	0.0	0.0	0.0	0.0

DESCRIPTION: Funding for economic order quantity (EOQ) for the FY 98-01 Multiyear Procurement of Army TACMS. The Army TACMS is a ground-Block IA integrates global positioning system (GPS) components and increases the range of the Block I missile. Army TACMS missiles are fired from launched missile system consisting of a surface-to-surface guided missile with an anti-personnel anti-materiel (APAM) warhead. The Army TACMS the Multiple Launch Rocket System (MLRS) modified M270 launcher and are being deployed within the ammunition loads of corps MLRS battalions and/or division artillery MLRS batteries.

JUSTIFICATION: The EOQ funding is required for the buy out of the total Improved Missile Guidance Sets required for the multiyear procurement of the Army TACMS.

WEAPON SYS	TEM ADVANCE	WEAPON SYSTEM ADVANCE PROCUBEMENT EXHIBIT (P-10a)	EXHIBIT (P-10a		CURRENT YEAR FOR FISCAL YEAR PROGRAM	AL YEAR PROGRAM
WCC)	APARISON OF R	COMPARISON OF BEOLIEST TO EXECUTION	CITION			1997
	(TOA, Dolla	(TOA, Dollars in Thousands)			DATE Fe	February 1997
Weapon System Type (Model/Series No.)		FIRST SYSTEM AWARD DATE	ATE	FIRST SYSTEM COMPLETION DATE		INTERVAL BETWEEN
ARMY TACTICAL MSL SYS (ATACMS) - (ADV PROC)) - (ADV PROC)		Dec-97		May-99	SYSTEM COMPLETIONS (MONTHS)
Advance Procurement / Advance Funding Items Requested / Actual	Quantity	Date Contract Award Required / Actual	Date Delivery of First Equipment Required / Actual	Production Lead Time in Months Total Requested (Adm/Prod) Actival (Adm/Prod)	Total Cost Requested	Actual Contract Cost
(1)	(2)	(3)	(4)	(5)	(9)	(7)
1. CFE						
2. GFE (Specify)						
3. SUBTOTAL						
4. EOQ (MYP)	633	76-unc	Sep-98	15	00069	
5. (CFE)						
6. (GFE) (Specify)						
7. SUBTOTAL					00069	
8. Design						
9. Other (Indicate Specific Items)						
10. TOTAL					00069	
NARRATIVE DESCRIPTION						
The Lead of the \$6000 and \$4000 and				:		;

The bulk of the \$69M in FY 97 will be used to buy out the total 633 Improved Missile Guidance Sets (IMGS) units required for the FY 98-01 Multiyear Procurement.

Exhibit P-40R	Budget Item Justification Sheet

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	ጀ	JDGET ITEN	BUDGET ITEM JUSTIFICATION SHEET	ATION SHEI	H	···		Februar	February 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUR	MISSILE PROCUREMENT /Other Missiles	lles					ATACMS/BA	ATACMS/BAT (CA6101)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
OUANTITY					50	100	150	68	194	1223	1806
COST (in millions)					60.8	80.7	109.9	94.3	190.8	968.5	1505
Initial Spares (in millions)											
Total (in millions)					8.09	7.08	109.9	94.3	190.8	968.5	1505
Unit Cost (in millions)					1.2	8.0	0.7	1.1	1.0		

The Army TACMS Block IIA (ATACMS Block IIA) will be a ground launched, solid propellant, inertially DESCRIPTION: The Army Tactical Missile System Block II (ATACMS BLK II), a version of the currently fielded and combat-proven Army TACMS Block I launched from the Multiple Launch Rocket System (MLRS) modified M270 launcher and will be deployed within the ammunition loads of corps MLRS guided (GPS aided) missile system with 6 BAT P3I submunitions as its payload. The ATACMS Block IIA will be launched from the M270 launcher in missile, will be a ground launched, solid propellant, inertially guided (GPS aided) missile system with 13 BATs or P3I BATs as its payload. It will be response to the same Command and Control (C2) nodes applicable to the Block I, Block IA, and Block II missiles. Since the Block IIA payload only nouses 6 submunitions rather than 13, as in the Block II, it is capable of achieving extended ranges comparable to the Block IA. battalions and/or division artillery MLRS batteries.

JUSTIFICATION: The primary mission of the ATACMS BLK II is to delay, disrupt, neutralize, or destroy armored combat vehicles/organization. ATACMS destroy the Block II target sets plus cold stationary tanks and armored combat vehicles as well as moving and stationary surface-to-surface missile (SSM) targets. Global Positioning System (GPS) technology will increase accuracy in flight. The mission of the ATACMS Block IIA will be to delay, disrupt, or BLK II will carry and dispense BAT and BAT P3I submunitions deep in enemy territory where these submunitions will automatically track and destroy transporter erector launchers (TELs) at extended ranges. The Block IIA missile will dispense 6 BAT P3I submunitions at ranges beyond the Block II

P-40H	Sheet
Exhibit	Justification
	Item
	Budget

							DATE				
	B	BUDGET ITEM JUST	A JUSTIFICA	<i>IIFICATION SHEET</i>	ᇤ			Februar	February 1997		
APPROPRIATION / BUDGET ACTIVITY	VITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUREMENT /Other Missiles	EMENT /Other Miss	lles					ATACMS BL	ATACMS BLK II (CA6105)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY					20	100	150	89	144	673	1206
COST (in millions)					60.8	80.7	109.9	84.5	128.3	509.1	973
Initial Spares (in millions)											
Total (in millions)					60.8	80.7	109.9	84.5	128.3	509.1	973
Unit Cost (in millions)					1.2	8.0	0.7	0.8	0.8		

DESCRIPTION: The Army Tactical Missile System Block II (ATACMS BLK II), a version of the currently fielded and combat-proven Army TACMS Block I missile, will be a ground launched, solid propellant, inertially guided (GPS aided) missile system with 13 BATs or P3I BATs as its payload. It will be launched from the Multiple Launch Rocket System (MLRS) modified M270 launcher and will be deployed within the ammunition loads of corps MLRS battalions and/or division artillery MLRS batteries.

ATACMS BLK II will carry and dispense BAT and BAT P3I submunitions deep in enemy territory where these submunitions will automatically track and JUSTIFICATION: The primary mission of the ATACMS BLK II is to delay, disrupt, neutralize, or destroy armored combat vehicles/organizations. destroy targets. Global Positioning System (GPS) technology will increase accuracy in flight.

Exhibit P-40R	ustification Sheet
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	8	BUDGET ITEM JUSTIFICATION SHEET	M JUSTIFIC,	ATION SHE	ET			February 1997	ry 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
-	MISSILE PROCUI	MISSILE PROCUREMENT /Other Missiles	siles					ATACMS BLK	ATACMS BLK IIA (CA6110)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
OLIANTITY									20	220	900
COST (in millions)								6.6	62.5	459.3	532
Initial Spares (in millions)											
Total (in millions)								9.6	62.5	459.3	532
Unit Cost (in millions)									1.3		
TA A MINISTER A A TANK DISOLUTA / AT	OVE Number	MC Diook II/	SMOATAL	Block HA) wi	ll he e aroun	d launched	solid propells	ant inertially	milded (GP.	ACMS Block IIA) will be a ground launched solid propellant inertially quided (GPS aided) missile system	ile system

Control (C2) nodes applicable to the Block I, Block IA, and Block II missiles. Since the Block IIA payload only houses 6 submunitions rather than 13, as in DESCRIPTION: The Army TACMS Block IIA (ATACMS Block IIA) will be a ground launched, solid propellant, inertially guided (GPS alded) missile systemed and with 6 BAT P3I submunitions as its payload. The ATACMS Block IIA will be launched from the M270 launcher in response to the same Command and the Block II, it is capable of achieving extended ranges comparable to the Block IA.

armored combat vehicles as well as moving and stationary surface-to-surface missile (SSM) transporter erector launchers (TELs) at extended ranges. JUSTIFICATION: The mission of the ATACMs Block IIA will be to delay, disrupt, or destroy the Block II target sets plus cold stationary tanks and The Block IIA missile will dispense 6 BAT P3I submunitions at ranges beyond the Block II system.

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TILLE/NO MISSILE PROCUREMENT / 2	PROCURI	MISSILE PROCUREMENT / 2 / Other Missiles	er Missiles	B. WEAPON	N ATACMS BLI	ATACMS BLK II (CA6105)		C. MANUFACTURER NAME Lockheed Martin Vought Sys	sys	D. DATE Febru	TE February 1997
Missiles	₽		FY 96			FY 97			FY 98			FY 99	
Cost Elements	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		000\$	Each	\$000	\$000	Each	\$000	000\$	Each	000\$	000\$	Each	000\$
Missile Hardware- Recurring Prime Contract (Includes IPF) GFE				·							39548	20	791
Flight Kits Engineering Semines											1659		
Engineering Change Orders (ECOs)											1408		
Subtotal Missile Hardware											43434		
Procurement Support Project Management Admin Production Engineering Support											1940		
Subtotal Procurement Support											6251 10272		
TOTAL MISSILE FLYAWAY						***					53706		
Command & Launch Integration Command & Launch Integration Spt Subtotal C&L Integration											920 920		
Support Cost Missile Test Device ATMF Test and Support Equipment Subtotal Support Cost											2560 3595 6155		
Gross P-1 End Cost Less: Prior Year Adv Proc			•								60781		
Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc. Other Non P-1 Costs Initial Spares											60781		
MODS						, , ,							
TOTAL											60781		

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ADPRIATION / BUDGET ACTIVITY					C. P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	# #		,	
	MISSILE PROCUREMENT / Other Missiles					4	CMS/BAT (CA			
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ATACMS BLK II										
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	8	BUDGET ITEM JUSTIFICATION SHEET	M JUSTIFIC/	ATION SHEI	ᇤ			February 1997	ry 1997		
APPROPRIATION / BUDGET ACTIVITY	IVITY				P-1 ITEM NOMENCLATURE	LATURE					
	MISSILE PROCUI	MISSILE PROCUREMENT /Other Missiles	iles					BAT (C	BAT (CA6100)		
	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete Total Program	Total Program
QUANTITY				305	547	1500	1900	2200	2900	10519	19871
COST (in millions)				85.2	100.1	170.3	200.8	200.1	238.9	762.5	1757.9
Initial Spares (in millions)											
Total (in millions)				85.2	100.1	170.3	200.8	200.1	238.9	762.5	1757.9
Unit Cost (in millions)				0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1
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attack of operating armored vehicles. The BAT is a guided submunition that searches for, tracks, and destroys armored, mobile targets. The Pre-Planned DESCRIPTION: The BAT submunition is an anti-armor, top attack submunition with acoustic and infrared (IR) seekers working in tandem for autonomous Product Improvement (P3I) BAT uses millimeter wave, infrared, and acoustic seekers in tandem to attack additional target arrays which include cold stationary or dug-in targets and surface-to-surface missile transporter erector launchers.

JUSTIFICATION: The BAT submunitions will be carried deep into enemy territory by the Army Tactical Missile System (ATACMS) Block II. It will be dispensed over numerous high-payoff targets to selectively attack and destroy individual targets. By utilizing acoustic technology, BAT has the advantage of a large footprint which allows it to compensate for target location errors.

Missiles Cost Analysis	<u> </u>	A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 2	ET ACTIVITA PROCURE	N/BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 2 / Other Missiles	r Missiles	B. WEAPON		BAT (CA6100)		C. MANUFACTURER NAME Northrop Grumman Corp	0	D. DATE Febru	TE February 1997
Missiles	₽		FY 96			FY 97			FY 98			FY 99	
nts	9	TotalCost	Qty	UnitCost	TotalCost	Qţ	UnitCost	TotalCost	δţ	UnitCost	TotalCost	Q Šţ	UnitCost
	Ħ	\$000	Each	000\$	\$000	Each	000\$	000\$	Each	000\$	000\$	Each	\$000
Missile Hardware- Recurring Prime Contract (Includes IPF) GFE								74188	305	243	82232	547	150
Flight Kits Engineering Services Engineering Change Orders (ECOs) Fielding								1496			4553 2646 7		
Subtotal Missile Hardware								75684			89438	•	
Procurement Support Project Management Admin Production Engineering Support Test and Evaluation Subtotal Procurement Support				· · · · · · · · · · · · · · · · · · ·				2920 3819 2213 8952			3440 5189 2000 10629		
TOTAL MISSILE FLYAWAY				7				84636			100067	·	
Command & Launch Integration Command & Launch Integration Spt Subtotal C&L Integration													
Support Cost Missile Test Device ATMF Test and Support Equipment Subtotal Support Cost								572 572			70		
Gross P-1 End Cost								85208			100137	*	
Less: Frior Year Adv Proc Net P-1 Full Funding Cost PLUS P-1 CY Adv. Proc. Other Non P-1 Costs Initial Spares MODS								85208			100137		
TOTAL				-				85208		· <u>· · · · · · · · · · · · · · · · · · </u>	100137		

BUDGET PRO	BUDGET PROCUBEMENT HISTORY AND PLANNING EXHIBIT (P-5A)	PLANNIN	G EXHIBIT (P-5A)					DATE	February 1997	
B. APPROPRIATION / BUDGET ACTIVITY			()		2. P-1 ITEM N	C. P-1 ITEM NOMENCLATURE	Æ		ion (m)	Τ
	MISSILE PROCUREMENT / Other Missiles						BAT (CA6100)			
LINE ITEM / FISCAL YEAR		CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST	SPECS S AVAIL F	SPEC IF YES W/A REV REO'D	W/A
БАТ FY 99	Northrop Grumman Hawthorne, CA Northrop Grumman Hawthorne, CA	SS/FPI MICOM	MICOM	Jan-98 Mar-99	Sep-99	305	243			
REMARKS:						·				

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	BUE	BUDGET ITEM JUST	JUSTIFICATION SHEET	EET			February 1997	
ACT	ACTIVITY			P-1 ITEM NOMENCLATURE	ш			
Σ	MISSILE PROCUREMENT /Modification of Missles	Additication of Missles				PATRIOT MODS (C50700)	DS (C50700)	
Г	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Π	0	0	0	0	0	0	0	0
Γ	6.8	23.4	20.8	15.6	19.6	24.3	19.9	16.5

DESCRIPTION: The PATRIOT Weapon System Growth Program is in response to a Report of the Defense Science Board Task Force on PATRIOT Vulnerability (1978) (SECRET) and the Air Threat to Central Europe (1978-1988) ATCE-1988 (SECRET) dated 1 Aug 78, and was part of the Mid 1980 ASARC/DSARC process approving the initiation of PATRIOT production.

COST (in millions) QUANTITY

PPROPRIATION / BUDGET ACTIVITY

JUSTIFICATION: The above funding is required to support the planned system Growth Program P3I, anticipated Materiel Changes which will add the following hardware enhancements/improvements to the PATRIOT Weapon System:

DATE	February 1997		CONTROL TO COLUMN
	IT ITEM JUSTIFICATION SHEET	P-1 ITEM NOMENCLATURE	A Missian

		BUDGET ITEM JUSTIFIC	TIFICATION SHEET		DATE		February 1997	
APPROPRIATION / BUDGET ACTIVITY MISSILI	ACTIVITY MISSILE PROCUREMENT /Modification of Missies	tion of Missies	P-1 ITEA	P-1 ITEM NOMENCLATURE		PATRIOT MODS (C50700)	C50700)	
OSIP No.	Description							
Classification	All PYs	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
1-88-03-1224	BLOCK VII							
100	10.2	4.0	0.4	0.0	0.0	0.0	0.0	0.0
1-88-03-1227	WEAPON CONTROL COMPUTER (WCC) UPGRADE	L COMPUTER (V	VCC) UPGRADE					
	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-92-03-1235	CDI PHASE I							
	3.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
1-93-03-1237	COMMUNICATION ENHANCEM	ENHANCEMENTS	S				and the state of t	
	0.0	0.0	9.7	9.0	12.4	14.9	15.2	12.5
1-89-03-1230	BLOCK VIII (RAM MODS)	ODS)						
	0.0	0.0	4.6	9.9	7.2	9.4	4.7	4.0
1-95-03-1243	AIR CONDITIONER UPGRADE	UPGRADE						
	0.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0
1-97-03-1244	INTEGRATED DIAGNOSTIC SU	NOSTIC SUPPO	PPORT SYSTEM					
	0.0	6.1	6.1	0.0	0.0	0.0	0.0	0.0
1-97-03-1245	GEM PLUS/MINUS							
	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0
Totals	0 02	7 80	8 00	и и	9 0	2.0		U C
0.000	0.0	1.07	20.0	0.0	19.0	24.3	6.6	C'01
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MODIF	MODIFICATION INSTALLATION SUMMARY	USTALL	ATION S	UMMAR	>		Date		
			(TOA, Dollars in Millions)	ollars in 1	Millions)			February 1997	97
	ă								
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
PATRIOT MODS									
C50700	96	0	ć	c	0	C	0	0	3.8
WEAPON CONTROL COMPUTER (WCC) UPGRADE	6.1		0.0	0.0	0.0	0.0	0.0	0.0	6.1
CDI PHASE I	0.7		0.0	0.0	0.0	0.0	0.0	0.0	0.8
COMMUNICATION ENHANCEMENTS	0.0		0.9	0.8	=	1.3	4.	-	9.9
BLOCK VIII (RAM MODS)	0.0		4.0	9.0	0.7	0.9	0.4	0.3	3.3
AIR CONDITIONER UPGRADE	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
INTEGRATED DIAGNOSTIC SUPPORT SYSTEM	0.0		0.2	0.0	0.0	0.0	0.0	0.0	0.4
GEM PLUS/MINUS	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Totals	10.4	1.2	1.6	4.1	6 .	2.2	1 .8	4.	21.8
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	INDIVIDUAL MODIFICATION Date February 1997
MODIFICATION TITLE:	BLOCK VII 1-88-03-1224
MODELS OF SYSTEMS AFFECTED:	Radar Set, ECS, ICC, LS, BME, BMG, CRG
DESCRIPTION / HIGHER ATION.	
HESCRIPTION / JOSTIFICATION:	
Ins modification provides corrections to problems Materiel Change involve improvements to the Rads Battalion Maintenance Equipment/Group, Commur installation of retrofit modification kits to bring fielde	Ins modification provides corrections to problems in the field which have been identified and incorporated into ECPs. Corrections included in this Materiel Change involve improvements to the Radar Set, Engagement Control Station, Information and Coordination Central, Launching Station, Battalion Maintenance Equipment/Group, Communications Relay Group and ISE/PFASC Shop Sets. The purpose of this MC is the acquisition and installation of retrofit modification kits to bring fielded PATRIOT hardware up to the production baseline configuration.
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	VELOPMENT MILESTONES: PLANNED ACCOMPLISHED
Major Milestones not applicable.	olicable.

					INDI	VIDUAL	MODI	INDIVIDUAL MODIFICATION	N							Date		Februa	February 1997	
MODIFICATION TITLE (Cont):		8	OCK	BLOCK VII 1-8	38-03-1224	1224		,										İ		
FINANCIAL PLAN: (\$ in Millions)																				
	FY 1996	996 Prior	FV 1997	265	FV 1	1998	ξ	1999	FY 20	2000	FY 2001	5	FY 20	202	FY 2003	603	2		TOTAL	AL.
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RDT&E	None																			
PROCUREMENT																				
Kit Quantity														•					6	,
Installation Kits	253	9.9	09	3.9	19	0.3													332	10.8
Installation Kits Nonrecurring							•													
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TV 4006 9 Drior Bont - Kits	25.2	ď																	253	3.6
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FY 1999 Eqpt Kits																				
FY 2000 Eqpt kits									_			_		•	-					
FY 2001 Eqpt kits																				
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits															,					
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	253	3.6	9	0.1	19	0.1													332	3.8
Total Procurement Cost		10.2		4.0		0.4														14.6
																				,
METHOD OF IMPLEMENTATION Contractor Field Teams	Contr	actor F	ield Te	sms	ADMIN	STRAT	NE LE	ADMINISTRATIVE LEADTIME:		9	Months		PRODUCTION LEADTIME:	CTION	LEADT	MĒ	9	Months		
Contract Dates:		FY 1997:	 	Dec 96	,		FY 1998:	ë e	_	Dec 97			FY 1999: FX 4000:							
Delivery Date:		FY 1997:	:	/a unc			FY 1998:	.;.		oe inc			FY 1999:							

Installation Schedule: BLOCK VII 1-88-03-1224	tule: BL	<u> </u>		-88-0	3-122	4											Date		Febru	February 1997	7				
	FY 1996		F	FY 1997			FY 1998	866			FY 1999	999			FY 2000	00			FY 2001	5					
	& Prior	₩	~ 1	ഗ്വ	41		ଧା	က	41	H	⊘ I	ത	41	-1	CAI	юl	41	⊣	C4		41				Total
Inputs																									
FY 1996 & Prior	197	28	88																						253
FY 1997				5	15	15	5																		
FY 1998								19																	19
FY 1999																									
Outputs																									
FY 1996 & Prior	169	28	28	28																					253
FY 1997					15	15	15	15																	9
FY 1998									19																19
FY 1999																									
			FY 2000	8			FY 2001	=			FY 2002	C!		ш	FY 2003			ı.	FY 2004			Ŧ	FY 2005		
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Inputs																		٠							
FY 2000																									
FY 2001																									
FY 2002																									
FY 2003																									
Outputs																									
FY 2000																									
FY 2001																									
FY 2002																									
FY 2003								!																	
Remarks:											•														
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	INDIVIDUAL MODIFICATION	Date	February 1997
MODIFICATION TITLE:	WEAPON CONTROL COMPUTER (WCC) UPGRADE 1-88-03-1227		
MODELS OF SYSTEMS AFFECTED: ECS & ICC	ECS & ICC		
DESCRIPTION / JUSTIFICATION:			

expanded WCC will be implemented by the replacement of the current Recovery Storage Unit (RSU) and the Mass Storage Unit (MSU) with an Information and Coordination Central (ICC) will be replaced by the VHSIC WCC. Peripheral devices which will permit the full utilization of the Change will increase central processing speed throughout and available memory. Current RAM hardware usage is at 95% eliminating future optical disk. This MC requires WCC software enhancements to be blocked with others in a Post Deployment Build 4(PDB-4). The Materiel replacement with a Very High Speed Integrated Circuit (VHSIC) WCC. The current WCC in the Engagement Control Station (ECS) and This task's objective is to increase (by four times) the speed and memory size of the current Weapon Control Computer (WCC) though growth. VHSIC technology and expanded memory will accomodate future throughput and growth.

	y Design Review:	sign Review:	Test and Evaluation: 1QFY92	ent Test and Evaluation: 2QFY92 3QFY92	ational Test and Evaluation: N/A N/A	ction Decision N/A N/A	able: N/A N/A
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	Preliminary Design Review:	Critical Design Review:	Contractor Test and Evaluation:	Development Test and Evaluation:	Inital Operational Test and Evaluation:	IPR Production Decision	TDP Available:

					<u>N</u>	IVIDUA	IL MOL	INDIVIDUAL MODIFICATION	NOI							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		8	EAPC	WEAPON CO	NTRC)L CO	MPU	TER (V	NTROL COMPUTER (WCC) UPGRADE 1-88-03-1227	UPGR	ADE 1	-88-0	3-122							
FINANCIAL PLAN: (\$ in Millions)																				
	FY 1996	986	EV 4007	200	2	9	2					100	ì	9		9	ľ	ļ	İ	
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RDT&E		27.2																	Î	27.2
PROCUREMENT																				
Kit Quantity	•																			
Installation Kits	110	49.9																	110	49.9
Installation Kits Nonrecurring																				
Equipment																				
Equipment Nonrecurring																				
Engineering Change Orders																				
Data		-																		
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware											-									
FY 1996 & Prior Eant Kits	110	9																	7	ď
FY 1997 Fant Kits		;																	2	- 5
FY 1998 Eqpt Kits																				
FY 1999 Eqpt Kits															•					
FY 2000 Eqpt kits																				
FY 2001 Eqpt kits																				
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	110	6.1																	110	6.1
Total Procurement Cost		56.0																		56.0
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METHOD OF IMPLEMENTATION Debot leams	Depor	l eams		•	ADMIN	SIHAI	IVE LE	ADMINISTRATIVE LEADTIME:	ш	ဖ	Months		PRODU	OTION (PRODUCTION LEADTIME:	ME	48	Months		
Confract Dates:	- •	FY 1997:					FY 1998:	 					FY 1999:	 						
Delivery Date:	_	FY 1997:				_	FY 1998:	 					FY 1999:	.: 6						

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February 1997 FY 2001						က										١
February FY 2001	_(C)					2004								Ì		
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FY 2000	വ															
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dule: FY	త															
Sche		Prior		Prior												
ation		96 & 97	86 66	uts 96 & 97	86		" 00	02 03	83	ŧ	8	10	8	83	ırks:	
Installation Schedule: WEAPON CONTROL COMPUTER (WCC) UPGRADE 1-88-03-1227 FY 1998 FY 1999 FY 1997		Inputs FY 1996 & Prior EV 1997	FY 1998 FY 1999	Outputs FY 1996 & Prior FY 1997	FY 1998 FY 1999		inputs FY 2000	FY 2001 FY 2002	FY 2003	Outputs	FY 2000	FY 2001	FY 2002	FY 2003	Remarks:	
				<u> </u>	<u>- + </u>	-		<u> </u>	_=_	<u> </u>				-		

INDIVIDUAL MODIFICATION		Date February 1997
MODIFICATION TITLE: CDI PHASE I 1-92-03-1235		
MODELS OF SYSTEMS AFFECTED: RADAR SET		
DESCRIPTION / JUSTIFICATION:		
Provides improvements to the identification process and enhances air defense effectiveness by reducing the potential for fratricide and providing better battlefield management of missile expenditures.	e effectiveness by reducing the	potential for fratricide and providin
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Development effort completed.	ompleted.	
Preliminary Design Review:	PLANNED 4QFY90	ACCOMPLISHED 1QFY91
Critical Design Review:	3QFY91	4QFY91
Contractor Test and Evaluation:	2QFY92	3QFY92
Development Test and Evaluation:	2QFY92	1QFY94
Inital Operational Test and Evaluation:	N/A	N/A
IPR Production Decision	N/A	N/A
TDP Available:	N/A	N/A

					QNI	IVIDUA	IL MOF	INDIVIDUAL MODIFICATION	NOI							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		ਹ	CDI PHASE	ASE I	1-92-(1-92-03-1235	35													
FINANCIAL PLAN: (\$ in Millions)																				
	FY 1996	996	EV 1007	700	ΕV	1008	ù	FV 1999	ĒΫ́	FV 2000	FY 2001	100	ΕV	200	FY	003		2	TOTAL	<u> </u>
	S S	<u></u>	ð	\$	ĝ	\$	ē	\$	ð	8	ð	\$	Οţ	Sty Sty	Qt	s th	Qt	\$	Qty	\$
RDT&E		14.6																		14.6
PROCUREMENT																				
Kit Quantity		-																		
Installation Kits	19	3.1	7	0.2															21	3.3
Installation Kits Nonrecurring			**																	
Equipment																				
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment											-									
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1996 & Prior Eqpt Kits	19	0.7																,	19	
FY 1997 Eqpt Kits			2	0.1															CI	0.1
FY 1998 Eqpt Kits																				
FY 1999 Eqpt Kits												_								
FY 2000 Eqpt kits								_												
FY 2001 Eqpt kits																	•			
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	19	0.7	2	0.1															7	0.8
Total Procurement Cost		3.8		0.3																4.1
METHOD OF IMPLEMENTATION Contractor Mod Team	Cont	ractor N	fod Tea	Ę:	ADMIN	IISTRA	TIVEL	ADMINISTRATIVE LEADTIME:	ij	9	Months		PROD	PRODUCTION LEADTIME:	V LEAD	TIME:	9	Months		
Contract Dates:		FY 1997:	ë i	Nov 96	. و		FY 1998:	:86:					FY 1999:							
Delivery Date:		FY 1997:	اي	May 97			2	38:					% LL	<u>.</u>						

Installation Schedule: CDI PHASE I 1-92-03-1235	dule: C[J PH	ASE I	1-92	-03-1	235										7	Date		Febru	February 1997	2			
	FY 1996		FΥ	FY 1997			Ŧ	FY 1998			FY	FY 1999			FY 2000				FY 2001	5				
	& Prior	Н	C)	ကျ	41	-	ঝ	ଠା	41	-1	CII	ଠା	41	-1	C4	ଚା	41	-1	CVI		41			Total
Inputs																								
FY 1996 & Prior	14	7	က																					
FY 1997				8																				
FY 1998						•																		
FY 1999																								
Outputs																								
FY 1996 & Prior	13	-	8	က																				
FY 1997					8																			
FY 1998																								
FY 1999																								
			FY 2000	2			FY 2001	201			FY 2002	Ŋ		ш	FY 2003	~		Œ	FY 2004			FY 2005	55	
		-	2	က	4		,,,	2 3	4	-	8	က	4	-	Ø	ო	4	-	7	ဗ	4	1 2	က	4 Total
Inputs																								
FY 2000																								
FY 2001																								
FY 2002																								
FY 2003																								
Outputs																								
FY 2000																								
FY 2001																								
FY 2002																								
FY 2003																								
Remarks:																								

	INDIVIDUAL MODIFICATION		Date	February 1997
MODIFICATION TITLE:	COMMUNICATION ENHANCEMENTS 1-93-03-1237	37		
MODELS OF SYSTEMS AFFECTED:	Fire Unit			
DESCRIPTION / JUSTIFICATION:				
Communications Enhancements focuses on intra operations. It provides additional interfaces for to fire unit voice and data interface into the Army Comeans; and, a fiber optic port to provide a local an international agreements requirements.	Communications Enhancements focuses on intra-battalion communications and improved interoperability at the fire unit level for contingency operations. It provides additional interfaces for told-in intelligence source; CADCI to provide automated switching within the battalion and permits fire unit voice and data interface into the Army Common User System (ACUS); high speed filters to permit access into long haul data transmission means; and, a fiber optic port to provide a local area network (LAN) interface with the battery command post.	proved interoperability at the oprovide automated switchinn speed filters to permit acces he battery command post.	fire unit level for c ig within the battal ss into long haul d	contingency ion and permits ata transmission
This is a subset of the full Re	This is a subset of the full Remote Launch/Communication Enhancement Upgrade Program.	Program.		
DEVELOPMENT STATUS / MAJOR D	DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: Communication Upgrade Development Program was initiated in FY95 and is ongoing PLANNED ACCOMPLISHED	Development Program was inl PLANNED	itiated in FY95 and ACCOMPLISHED	d is ongoing
Preliminary Design Review:	view:	4QFY95	3QFY96	
Critical Design Review:	2	1QFY96	4QFY96	
TDP Available:		N/A		

					NDI)	/IDUAL	MODIF	INDIVIDUAL MODIFICATION	N							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		los Os	MMU	NICAT	ONE	NHA	CEM	ENTS	1-93	COMMUNICATION ENHANCEMENTS 1-93-03-1237	37									
FINANCIAL PLAN: (\$ in Millions)		Γ																		
	FY 1996 and Prior		FY 1997	16	FY 1998	86	FY 1999	666	FY 2000	000	FY 2001	100	FY 2002	200	FY 2	2003		2	70	TOTAL
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RDT&E		9.4	<u> </u>	6.1																15.5
PROCUREMENT																				
Kit Quantity		-																		
Installation Kits					4	8.8	4	8.2	9	11.3	7	13.6	8	13.8	4	11.4			53	67.1
Installation Kits Nonrecurring																				
Equipment	-																			
Equipment Nonrecurring	_				-								•							
Engineering Change Orders																				
Data																				
Training Equipment	-						-													
Support Equipment																				
Other																				
Interim Contractor Support												·								
										**										
Installation of Hardware										•										
FY 1996 & Prior Eapt Kits														•						
FY 1997 Eapt Kits																-		•		
FY 1998 Eqpt Kits					4	6.0			-										14	0
FY 1999 Eqpt Kits							4	0.8											. 4	0.8
FY 2000 Egpt kits								}	Ç	+									: «	+ 5
FY 2001 Eqpt kits	-						ia)			r.							^	
FY 2002 Eqpt kits		_											α	1 4					- α	14
FY 2003 Eapt kits)	:	4	7) 4	
(FY(TC) Eqpt (xx kits)															•	=			•	:
Total Installation Cost		\vdash	ŀ		4	6.0	4	0.8	9	=	7	1.3	8	4.1	4	=			53	6.6
Total Procurement Cost		ŀ	-	\vdash		9.7		9.0		12.4		14.9		15.2		12.5				73.7
<u> </u>																				
METHOD OF IMPLEMENTATION Contractor Mod Team	Contracto	or Mod	Team	•	SINIMO	TRATI	VE LEA	Ψ	!	က	Months		PRODU	CTION	PRODUCTION LEADTIME:	IME:	18	Months		
Contract Dates: Delivery Date:	7 7	FY 1997: FY 1997:				u. u.	FY 1998: FY 1998:		MAR 98 SEP 99				FY 1999: FY 1999:		MAR 99 SEP 00					
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	Total				4	4				4	4		Total		9	^	80	4		9	۷.	ω	4		
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266	41										က		4					Ø				0			
February 1997 FY 2001	(N)					ო					က	4	က				8					CI			
February FY 2001	. «1					က					4	FY 2004	Ø				8					7			
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Date					က					က			ဗ			_					8				
FY 2000	(n)				က					4		FY 2003	8			7					0				
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FV 1999	(a)											02	က		-					-					
	. 01											FY 2002	0		_					7					
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93-03	41												4		Ø										
TS 1-(g (7)												က												
MENTS EV 1998	. ou											FY 2001	8												
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VICATION EV 1997	S (0)											000	8												
JUNI T	. NI											FY 2000	-												
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Installation Schedule: COMMUNICATION ENHANCEMENTS 1-93-03-1237		Inputs	FY 1996 & Prior	FY 1997	FY 1998	FY 1999	Outputs	FY 1996 & Prior	FY 1997	FY 1998	FY 1999			Inputs	FY 2000	FY 2001	FY 2002	Y 200.	Outputs	FY 2000	FY 2001	FY 2002	FY 2003	Remarks:	
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				N	NIDUA	IL MOD	INDIVIDUAL MODIFICATION	NO						Ω	Date		February 1997	y 1997	
MODIFICATION TITLE (Cont):		BLOCK VIII (R	III/ >	(RAM N	(SGO)	1-89	AM MODS) 1-89-03-1230	30											
FINANCIAL PLAN: (\$ in Millions)	Ĺ	_																	
	FY 1996 and Prior	È	FY 1997	F	FY 1998	F	FY 1999	FY 2	2000	FY 2001	<u>[</u>	FY 2002	22	FY 2003	03	TC		TOTAL	۲
	Qty 8	ਰੇ	ક	Q	\$	Qty	\$	Qty	\$	Qty	\$	Qty	Н	Qty	Ω	λ	\$	δţ	↔
RDT&E		L																	
PROCUREMENT																			
Kit Quantity																			
Installation Kits				127	4.2	211	0.9	369	6.5	411	8.5	225	£.3	200	3.7			1543	33.2
Installation Kits Nonrecurring	· · · · · · ·																		
Equipment										•								•	
Equipment Nonrecurring	_																		
Engineering Change Orders																			
Data																			
Training Equipment																			
Support Equipment																			
Other																			
Interim Contractor Support											.,								
												<u> </u>	·						
Installation of Hardware										<u>,</u>									
FY 1996 & Prior Eapt Kits																			
FY 1997 Eapt Kits												•							,*****
FY 1998 Eqpt Kits	-			127	0.4													127	0.4
FY 1999 Eqpt Kits						211	9.0	-		-								211	9.0
FY 2000 Eqpt kits								369	0.7							-		369	0.7
FY 2001 Eqpt kits										411	6.0							411	0.9
FY 2002 Eqpt kits												225	9.4					225	0.4
FY 2003 Eqpt kits										-				200	0.3			500	0.3
(FY(TC) Eqpt (xx kits)											1		1		1				
Total Installation Cost				127	0.4	211	0.6	369	0.7	411	6.0	225	0.4	200	0.3			1543	3.3
Total Procurement Cost					4.6		6.6		7.2		9.4		4.7		4.0				36.5
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METHOD OF IMPLEMENTATION CONTractor Field Leams	Contractor	F18id 1	ватѕ	AUMI	EN LA	IVE LEAL	AUMINISTRATIVE LEAUTIME:	ה ה ה	٥	Months		PRODUCTION LEADTINE:		בולאחרו המילות		- -	MOLECUS		
Contract Dates:	FY 1997: FV 1997:					FV 1998	. œ	25 OHO			- 	FY 1999:		JUN 99					
Delivery Date.	2					<u> </u>	;	20.00					ı						

Installation Schedule: BLOCK VIII (RAM MODS) 1-89-03-1230	ile: BL	SS	VIII (F	3AM	MOD	3) 1-8	9-03-1	230								Date	ete		Februa	February 1997					
	FY 1996		FY 1997	266			FY 1998	98			FY 1999	66			FY 2000	0		_	FY 2001	_					
	& Prior		CΝ	ଚା	41		αŧ	ෆ i	41		21	ကျ	41		C¥	 ශ	41	-1	CII	ඩ 4⊦					Total
Inputs																									
FY 1996 & Prior																									
FY 1997																									
FY 1998								18	19	22	22	ន	ន												127
FY 1999												Ξ	=	Ξ	72	1	4	42	42						211
Outputs																									
FY 1996 & Prior																									
FY 1997																									
FY 1998									18	19	22	22	83	23											127
FY 1999													=	F	Ξ	12	14	4	42	42					211
ga an ing			FY 2000	c			EV 2001	-		ά	EV 2002			ì	EV 2003			Ì	EV 2004			300c VI	Ä		-
		-	7	ი	4		2	က	4		2 2	က	4	-	3 4	က	4	-	2	က	4	 2 5	ც	4	Total
Inputs																									
FY 2000				19	19	19	20	73	73	73	73														369
FY 2001								21	21	22	22	80	80	80	82										411
FY 2002												20	20		20	35	35	35	40						225
FY 2003																20	20	20	20						200
Outputs																									
FY 2000					19	19	19	50	73	73	73	73													369
FY 2001									2	2	22	22	80	80	80	82									411
FY 2002													20	20	20	50	32	35	35	40					225
FY 2003																	20	20	20	50					200
Remarks:																									

				≤	<u>יסואום:</u>	AL MO	INDIVIDUAL MODIFICATION	NO.							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):	4	ir Con	dition	er Up	grade	1-95-(Air Conditioner Upgrade 1-95-03-1243	3											
FINANCIAL PLAN: (\$ in Millions)	300	_													:				
	and Prior	Ł	FY 1997	F	FY 1998	F	FY 1999	FY	FY 2000	FY	FY 2001	ΕÝ	FY 2002	FY	FY 2003		2	TOTAL	Ī
i c	Oty \$	ð	S	ĝ	€9	ĝ	69	ð	\$	ð	69	ĝ	8	ē	8	ð	49	Qty	€9
HD1&E PROCUREMENT																			
Kit Quantity																			
Installation Kits		294	6.9															294	6.9
Installation Kits Nonrecurring																			-
Equipment																			
Equipment Nonrecurring																			
Engineering Change Orders																			
Data																			
Training Equipment																			
Support Equipment									•										
Other																	•		
Interim Contractor Support																			
Installation of Hardware																	-		
FY 1996 & Prior Eqpt Kits																			
FY 1997 Eqpt Kits		294	0.3												_			294	0.3
FY 1998 Eqpt Kits																		}	ś
FY 1999 Eqpt Kits																			
FY 2000 Eqpt kits																			
FY 2001 Eqpt kits													_						
FY 2002 Eqpt kits					•••										_				
FY 2003 Eqpt kits																			
(FY(TC) Eqpt (xx kits)																	•		
Total Installation Cost		294	0.3															294	0.3
Total Procurement Cost			7.2																7.2
METHOD OF IMPLEMENTATION Contractor Mod Team	Contractor Mc	od Tean	_	ADMII	NISTRA	TIVELI	ADMINISTRATIVE LEADTIME:	ш	9	Months		PRODU	PRODUCTION LEADTIME:	I LEAD	TIME:	9	Months		
Contract Dates:	FY 1997: EV 1007:		OCT 96	<u>د</u> و		FY 1998:	98:					FY 1999:	ġi d						
Collydy Date.	881		ALL			FY 19.	38:					FY 1999:	G:						

Installation Schedule: Air Conditioner Upgrade 1-95-03-1243	Jule: Air C	ondition	er Up	grade	1-95	-03-12	43								Date		щ	February 1997	1997				
	FY 1996	Ŧ	FY 1997			7	FY 1998			FY 1999	6		ш	FY 2000			Œ	FY 2001					
	& Prior 1	21	_හ	41	- -1	Οŧ	_(C)	41	┯	C II	ල 	4		2 3	41	- 1	⊘ I	ଚା	41				Total
Inputs																							
FY 1996 & Prior																							
FY 1997			147	147																			294
FY 1998																							
FY 1999																							
Outputs																							
FY 1996 & Prior																							
FY 1997					147	147																	294
FY 1998																							
FY 1999																							
		FY 2000	8			FY 2001	Ξ		щ	FY 2002			Ŧ	FY 2003			FY 2004	900			FY 2005	902	
		1 2	က	4	_		က	4	-	7	က	4	-		້ ຕ	4	·		ຕ	4	-	2 3	4 Total
Inputs																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003																							
Outbuts																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003																							
Remarks:				•																			

	INDIVIDUAL MODIFICATION		Date	February 1997
MODIFICATION TITLE:	INTEGRATED DIAGNOSTIC SUPPORT SYSTEM 1-97-03-1244	1-97-03-1244		
MODELS OF SYSTEMS AFFECTED:	TED:			
DESCRIPTION / JUSTIFICATION:				
At the fire unit level, maintenance monitors defect systems. Digital communications enable secure te	At the fire unit level, maintenance monitors defect faults and automatically access diagnostic/repair procedures in electronic TMs and expert systems. Digital communications enable secure tele-maintenance from weapons platform to factory for remote diagnostics and adjustments.	diagnostic/repair proced platform to factory for re	lures in electronic TMs mote diagnostics and	and expert adjustments.
DEVELOPMENT STATUS / MAJI	DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	PLANNED	ACCOMPLISHED	
Major Milestones not applicable.	not applicable.			

					NDIVID	UAL MC	INDIVIDUAL MODIFICATION	TION						٥	Date		Februa	February 1997	
MODIFICATION TITLE (Cont):		INTEGRATED	RAT		AGNC	STIC	SUPP(DIAGNOSTIC SUPPORT SYSTEM 1-97-03-1244	YSTE	M 1-97-	03-12	44							
FINANCIAL PLAN: (\$ in Millions)	4 4 600	Г																	
	and Prior		FY 1997	F	FY 1998		FY 1999	F	FY 2000	FY 2001	100	FY 2002	202	FY 2003	500	TC	1 1	TOTAL	
	Qty \$	Qt	8	Q Qt	у \$	Q.	\$	Ö Ç	\$	Qţ	\$	Qţ	\$	Οţ	8	à	æ	ð	æ
RDT&E						_												•	
PROCUREMENT Kit Quantity													-				•		
Installation Kits			7	5.9		5.9												4	11.8
Installation Kits Nonrecurring								···											
Equipment																			
Equipment Nonrecurring																		•	
Engineering Change Orders						-													
Data I · · · I																			
Training Equipment	·													_					
Support Equipment																			
Other																			
Interim Contractor Support	-															-	•		
		-																	
Installation of Hardware																		·	
FY 1996 & Prior Eqpt Kits		_															,		
FY 1997 Eqpt Kits			2	0.2														7	0.5
FY 1998 Eqpt Kits					_	0.2												_	0.2
FY 1999 Eqpt Kits																			
FY 2000 Eqpt Kits	_											-							
FY 2001 Eqpt Kits																			
FY 2002 Eqpt Kits																			
FY 2003 Eqpt Kits																			
(FY(TC) Eqpt (xx kits)		_	_	_	-									1	1				
Total Installation Cost			7 0	0.2	7	0.2		_							1			14	9.4
Total Procurement Cost		_		6.1	_	6.1	_	_											12.2
METHOD OF IMPLEMENTATION Contractor Mod Team	V Contractor	Mod Te	am	ΑD	MINIST	RATIVE	ADMINISTRATIVE LEADTIME:	ME:	က	Months	"	PRODL	JCTION	PRODUCTION LEADTIME:	IME:	6	Months		
Contract Dates:	<u>.</u>	FY 1997:	를	Feb 97		<u>`</u> i	FY 1998:	Feb 98	ω,			FY 1999:							
Delivery Date:	7	FY 1997:) S 100	, l		֡֡֡֞֞֓֓֡֓֞֓֓֓֡֡֓	1886:	26.30				661 11	ا ۾						

Installation Schedule: INTEGRATED DIAGNOSTIC SUPPORT	Inle:	EGR	ATEL	ODIA	GNOS	STIC (SUPP	ORT (SYSTI	EM 1-	SYSTEM 1-97-03-1244	-1244				Date	0		Febru	February 1997				
	FY 1996		FY 1997	266			FY 1998	866			FY 1999	66			FY 2000	0			FY 2001	Ξ				
	& Prior	-1	21	ଚ	41	H	CI	ю	41	-1	ଷ		41	-1	CI.		41	- -I	⊘i		41			Total
Inputs																								
FY 1996 & Prior																								
FY 1997						7																		
FY 1998										7														
FY 1999																								
Outbuts																								
FY 1996 & Prior																								
FY 1997							7																	
FY 1998											7													7
FY 1999																								
			200					,		i				İ										
		<u> </u>	FT 2000	ი	4		FY 2001	-	4	Ĺ -	FY 2002 2	ო	4	<u>_</u>	FY 2003	က	4	<u> </u>	FY 2004	m	4	FY 2005	ď	4 Total
Inputs																								
FY 2000																								
FY 2001																								
FY 2002																								
FY 2003																								
Outputs																								
FY 2000																								
FY 2001																								
FY 2002																								
FY 2003						:																		
Remarks:																								
																			į					

	INDIVIDUAL MODIFICATION		Date	February 1997
MODIFICATION TITLE:	GEM PLUS/MINUS 1-97-03-1245			
MODELS OF SYSTEMS AFFECTED:	PAC-2 Missile			
DESCRIPTION / JUSTIFICATION: Modification of existing PAC-2 missiles. Provides recertification cycle with a Surface Acoustic Wave	ESCRIPTION / JUSTIFICATION: Modification of existing PAC-2 missiles. Provides Cruise Missile Defense performance improvements by retrofitting PAC-2 missiles during missile recertification cycle with a Surface Acoustic Wave (SAW) Oscillator and a GEM fuze.	rmance improvements by r fuze.	etrofitting PAC-2 missi	iles during missile
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	VELOPMENT MILESTONES:	PLANNED	ACCOMPLISHED	
Major Milestones not applicable.	olicable.			
				,

				IND	IVIDUA	L MODI	INDIVIDUAL MODIFICATION	NC							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):)	GEM PLUS/MINUS 1-97-03-1245	WSN7	MINUS	1-97-(3-124	5												
FINANCIAL PLAN: (\$ in Millions)																			
	FY 1996	i	100	í							İ	i							
	and Prior Otv \$	Žĺ⋛	FY 1997	Ĉ	1998	PY 1999	666	7 \ 2 \ 2 \	5000 -	FY 2001	5 4	FY 20	2002	FY 2003	ε σ	2 - 2	υ 4	TOTAL	4
RDT&E	₋								,	;	,		,	+	•	ŝ	•	ĵ	•
PROCUREMENT																			
Kit Quantity																•			
Installation Kits		75	5.3															75	5.3
Installation Kits Nonrecurring																			
Equipment																			
Equipment Nonrecurring																			
Engineering Change Orders																			
Data													•						
Training Equipment												_							
Support Equipment																			
Other							-	-											
Interim Contractor Support																			
							**												
Installation of Hardware																			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																			
FY 1996 & Prior Eqpt Kits																	,		
FY 1997 Eqpt Kits		75	0.5										•					75	0.5
FY 1998 Eqpt Kits															•				
FY 1999 Eqpt Kits										.,									
FY 2000 Eqpt Kits																			
FY 2001 Eqpt Kits											·								
FY 2002 Eqpt Kits																			
FY 2003 Eqpt Kits																			
(FY(TC) Eqpt (xx kits)																			
Total Installation Cost		75	0.5															75	0.5
Total Procurement Cost		L	5.8																5.8
METHOD OF IMPLEMENTATION Contractor Mod Team	V Contractor M	lod Tear	F	ADMIN	ISTRAT	IVE LE/	ADMINISTRATIVE LEADTIME:		9	Months	ш	RODU	TION	PRODUCTION LEADTIME:	MĒ	18	Months		
Contract Dates:	FY 1997:	97:	Jan 99	_	_	FY 1998:					L	FY 1999:							
Delivery Date:	FY 1997:	97:	Jul 97		_	FY 1998:	÷.				ш.	FY 1999:							
				-															

Installation Schedule: GEI	Installation Schedule: GEM PLUS/MINUS 1-97-03-1245						Date	February 1997			
FY 1996	FY 1997 FY 1998	866	FY 1999			FY 2000		FY 2001			
& Prior	1 2 3 4 1 2	3 4 1	13	41	-	SI 63	4	K3	41		Total
Inputs											
FY 1996 & Prior											1
FY 1997			15 20	0 20	20						32
FY 1998											
FY 1999											
Outputs											
FY 1996 & Prior											ļ
FY 1997			_	15 20	20	20					75
FY 1998											
FY 1999											•
		,	200		Ľ	200		7000 N		EV 2005	
	1 2 3 4 1 2	3 4	1 2	ω 4	-	2 3	4	1 2 3	4	2 3	4 Total
Inputs											
FY 2000											
FY 2001											
FY 2002											
FY 2003											
Outputs											
FY 2000											
FY 2001											
FY 2002											
FY 2003					ŀ						
Remarks:											
					l						

Exhibit P-40	Item Justification Sheet
	Budget Item

						DATE		
	BUC	BUDGET ITEM JUST	<i>LIFICATION SHEET</i>	EET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	ΙΤΥ			P-1 ITEM NOMENCLATURE	3			
MIS	MISSILE PROCUREMENT /Modification of Missles	Addification of Missles				STINGER MODS (C20000)	DS (C20000)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	11.3	36.9	12.4	14.4	24.1	34.5	57.0	58.7

DESCRIPTION

moving, employing advanced counter-measures, or operating at night. These STINGER Block I Upgrade modifications maintain compatibility with all current and planned and launch platforms including Air-To-Air STINGER, AVENGER, and the gripstock used in shoulder fired applications. STINGER Block I Upgrades - Hardware and software modifications to the STINGER RMP Missile System improves performance against targets which are slow

gripstocks new EEPROMS must be procured and installed in existing, fielded gripstocks. For Air-to-Air Stinger, Bradley Linebacker, and Avenger, new circuit card STINGER Block I Platform Mods - In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. assemblies must be procured and installed in each systems Interface Electronics Assembly.

LINEBACKER fielding maximizes the utility of the FAADS C2I Kit and a Bradley Fighting Vehicle-Operation Desert Storm Kit which are being fielded separately by Bradiey LINEBACKER (formerly Bradley STINGER Fightling Vehicle - Enhanced (BSFV-E)) - The Bradley LINEBACKER is an air defense system based upon procurement to upgrade the existing BSFV-MUA with the addition of Bradley LINEBACKER modification kit. The kit includes an integrated, externally mounted minimal upgrades to the currently fielded Bradley Stinger Fighting Vehicle-Manpads Under Armor (BSFV-MUA). The Bradley LINEBACKER provides heavy maneuver forces with dedicated air defense against a variety of threat platforms. The Bradley LINEBACKER is a Non-Developmental Item rapid acquisition Standard Vehicle Mounted Launcher with a modified fire control. It fires up to four Stinger missiles while the crew remains under armor protection. CECOM and TACOM.

JUSTIFICATION

materiel change was developed to correct these deficiencies. This materiel change was recommended as the near term solution by the Air-to-Air Missile General and night time engagements. There is also a safety deficiency whereby aviation platforms must super-elevate to fire the missile. The STINGER Block I Upgrade STINGER Block I Upgrades - The STINGER-RMP Missile is currently deficient in engagements against head/tail-on and slow moving targets, counter-measures, Officer's Steering Committee.

STINGER Block I Platform Mods - In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. Without modifications, Block I missiles fired from these platforms will perform as Stinger-RMP missiles, negating the Block I missile improved performance.

current Army program. This materiel solution corrects major ADA deficiencies in survivability, fire control, target acquistion and identification, with a reduction in crew forces employing Ground Based Sensor data as provided through FAADS C2I. This modestly costed program provides more firepower for the money than any other Bradley LINEBACKER - The Warfighting Rapid Acquisition Panel approved the Bradley LINEBACKER as a rapid acquisition program on 26 January 95, which Document was approved and released by TRADOC. The Bradley LINEBACKER program leverages a portion of the fielded M2A2 Bradley Fighting Vehicle fleet, improves the employment of the approximately \$2 billion STINGER missile investment, and provides an armored Air Defense Artillery (ADA) fire unit with heavy provided a Milestone IIIa (ASARC) decision to enter limited production to support the Army's Force XXI initiatives. An abbreviated Operational Requirements size as a force savings.

		DATE
BUDGET ITEM JUSTIFICATION SHEET		February 1997
APPROPRIATION / BUDGET ACTIVITY P-1 ITE	I ITEM NOMENCLATURE	
MISSILE PROCUREMENT /Modification of Missles		STINGER MODS (C20000)

		BUDGET ITEM JUSTIFICATION SHEET	SATION SHE	ET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	CTIVITY		ď	P-1 ITEM NOMENCLATURE				
	MISSILE PROCUREMENT /Modification of Missles	of Missles				STINGER MODS (C20000)	(C20000)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
OSIP No.	Description							
Classification	All PYs	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
01-87-03-1510	STINGER Block I Upgrades	ades						
Operational	24.4	21.8	8.7	14.4	24.1	34.5	40.1	31.9
TBD	STINGER Platform Mods	qs S						
TBD	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0
TBD	Bradley LINEBACKER	-						
TBD	6.3	7.1	3.7	0.0	0.0	0.0	16.9	26.9
	!							
Totals	30.7	36.9	12.4	14.4	24.1	34.5	57.0	58.7
						1000 m		
		:						

MODIFICATION INSTALLATION SUMMARY	INSTALLAT	NON SUI	MMARY				Date		
(TOA,	(TOA, Dollars in Millions)	illions)]		February 1997	
	ă					- 1		ŀ	
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	EY 2002	EY 2003	TOTAL
STINGER MODS C20000			,	,	ı	ı	,		·
STINGER Block i Upgrades STINGER Platform Mods	0.0	0.0	0. 0.	0.0	0.0	0.0	0.0	0.0	0:0 0:0
Bradley LINEBACKER	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
					-				
						<u> </u>			
			······································						
			. 1						

	INDIVIDUAL	INDIVIDUAL MODIFICATION	Date February 1997	Γ
MODIFICATION TITLE:	STINGER Block I Upgrades	OSIP # 01-87-03-1510		
MODELS OF SYSTEMS AFFECTED:	STINGER RMP Missile			
DESCRIPTION / JUSTIFICATION:				
The STINGER Block I Upgradincrease overall missile perfort super-elevate. The engagemmeasures, and night time engalannch platforms which include recommended by the Air-to-Air	le materiel change incorporates ha mance in certain engagement sce lent scenarios in which missile pe agements. These changes include e Air-to-Air STINGER, AVENGER, ir Missile General Officer's Steerin	The STINGER Block I Upgrade materiel change incorporates hardware and software modifications to the STINGER-RMP missile system to increase overall missile performance in certain engagement scenarios and resolve a key aviation deficiency which requires aviation platforms to super-elevate. The engagement scenarios in which missile performance improves include head/tail-on and slow moving targets, countermeasures, and night time engagements. These changes include hardware changes to the missile and software changes to the command and launch platforms which include Air-to-Air STINGER, AVENGER, and gripstocks used in shoulder-fired applications. This materiel change was recommended by the Air-to-Air Missile General Officer's Steering Committee as the near term solution to the STINGER-RMP deficiencies.	STINGER-RMP missile system to cy which requires aviation platforms to and slow moving targets, counter-oftware changes to the command and plications. This materiel change was the STINGER-RMP deficiencies.	
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILEST	EVELOPMENT MILESTONES:	PLANNED	ACCOMPLISHED	
Begin development		3rd Qtr FY92	3rd Qtr FY92	
Production Qualification	ion	4th Qtr FY95	4th Qir FY95	
Software Critical Design Review	ign Review	4th Qtr FY96	2nd Qtr FY96	
Software Performance Assessment	e Assessment	2nd Qtr FY97	2nd Qtr FY97	

					<u>N</u>	VIDUAL	INDIVIDUAL MODIFICATION	ICATIO	z						آ	Date		February 1997	ry 1997	
MODIFICATION TITLE (Cont):		ST	INGE	R Blo	STINGER Block I Upgrades	grade		# dlS(OSIP # 01-87-03-1510	7-03-1	510									
FINANCIAL PLAN: (\$ in Millions)	Í																			
	FY 1996 and Prior	e ior	FY 1997	766	FY 1998	398	FY 1999	66	FY 2000	00	FY 2001	9	FY 2002	 20	FY 20	2003	15		TOTAL	TAL
	Otty	s	Q.	\$	Qty	s	Qty	\$	Qty	Н	Oty	æ	Qty	\$	Qty	\$	Δţ	\$	Qty	s
RDT&E		30.8		3.7																34.5
PROCUREMENT																		<u> </u>		
Kit Quantity	1,850		1,300		471		906	_	1,665	_	1,658		1,664		1,228		476		11,218	
Installation Kits																				
Installation Kits Nonrecurring		•	_					-		-						<u> </u>				<u></u>
Equipment		24.4		21.8		8.7		14.4		24.1		34.5		40.1	_	31.9		17.6		217.5
Equipment Nonrecurring					-															
Engineering Change Orders		_																		
Data							-													
Training Equipment									-			*								
Support Equipment																				
Other	-																			
Interim Contractor Support								•		-										
																	<u> </u>			
Installation of Hardware		- Instal	- lation o	l fHardw	 /are cos	- ts are in	cluded i	n Equip	I I I I I I I I I I I I I I I I I I I	- 10ve.										
FY 1996 & Prior Eqpt - Kits																				
FY 1997 Eqpt Kits			•																	
FY 1998 Eqpt Kits								**												
FY 1999 Eqpt Kits							. =:						_							
FY 2000 Eqpt kits													-				_			
FY 2001 Eqpt kits													_							
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost																				
Total Procurement Cost	1,850	24.4	1,300	21.8	471	8.7	906	14.4	1,665	24.1	1,658	34.5	1,664	40.1	1,228	31.9	476	17.6	11,218	217.5
						1					1	Ĺ	Š	CITC	1 1	į			140.00	
METHOD OF IMPLEMENTATION: Contract Dates:		contractor FY 1997: EV 1997:	_	All 2nd Q, FY97 4th O EV98	AUMINI 797	SIRAI I	AUMINISTRATIVE LEAD-TIME: 97 FY 1998: 2nd 98 FY 1998: 4th (: 2nc -	IME: 2nd Q, FY98 4th Q, FY99	_	Months	4	FRODUC FY 1999: FY 1999:	2 : · ·	FY 1999: 2nd Q, FY99 FY 1999: 4th Q FY00	.: 66. 20.		<u> </u>	Months	
Delivery Date.		1221	1	3			000	ı	,	,		-	3			, 				

Installation Schedule: STINGER Block I Upgrades	nle:	STING	ER B	lock I	Upgra	sapu		OSIP		.87-0	# 01-87-03-1510	C				Date	0		February 1997	ry 1997					
	FY 1996	ထ	Ŧ	FY 1997			FY 1998	866			FY 1999	666			FY 2000	8			FY 2001	_					
	& Prior	ᆔ	α,	ଠା	41	Н	8 1	ကျ	41	-1	0 1	ଚା	41	-	CJI	esi esi	41	-	OI.	83 44					Total
Inputs																									
FY 1996 & Prior	700	300	200	206	177	267																			1,850
FY 1997							324	326	324	326															1,300
FY 1998											117	118	118	118											471
FY 1999															226 2	226 2	227 2	227							906
Outputs																									
FY 1996 & Prior	130	270	300	300	200	206	177	267																	1,850
FY 1997									324	326	324	326													1,300
FY 1998													117	118	118 1	118									471
FY 1999																Ø	226 2	226 2	227 227	7:					906
			i				i			,				İ				i							
			FY 2000	000			FY 2001	-		_	FY 2002	٥ı		Ĺ	FY 2003			Ţ	FY 2004			FY 2005	ស		
		-	01	က	4	-	α	က	4	-	7	က	4	_	8	, ຄ	4	_	2 3	4	-	Ø	ဗ	4	Total
Inputs																									
FY 2000							416	416	416	417															1,665
FY 2001											414	414	415 4	415											1,658
FY 2002														4	416 4	416 4	416 4	416							1,664
FY 2003																		Ö	307 307	202	307				1,228
Outputs																									
FY 2000									416	416	416	417													1,665
FY 2001												•	414	414 4	415 4	415									1,658
FY 2002																4	416 4	416 4	416 416	9					1,664
FY 2003																				307	307	307	307		1,228
Remarks:																									
	l																				l				٦

	INDIVIDUAL MODIFICATION	SATION	Date	February 1997
MODIFICATION TITLE:	STINGER Platform Mods	OSIP # TBD		
MODELS OF SYSTEMS AFFECTED:	Manpads, Avenger, Bradley Linebacker, OH-58D	acker, OH-58D		
DESCRIPTION / JUSTIFICATION:				
In order to take advantage of the Block I missile's i electronically erasable programmable read only m Stinger, Bradley Linebacker, and Avenger, new cir Assembly. Without modifications, Block I missile improved performance.	In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. For MANPADS gripstocks, new electronically erasable programmable read only memory (EEPROM) must be procured and installed in each system's Interface Electronics Stinger, Bradley Linebacker, and Avenger, new circuit card assemblies must be procured and installed in each system's Interface Electronics Assembly. Without modifications, Block I missiles fired from these platforms will perform as Stinger-RMP missiles, negating the Block I missile improved performance.	improved capability, each firing platform must be modified. For MANPADS gripstocks, new emory (EEPROM) must be procured and installed in existing, fielded gripstocks. For Air-to culit card assemblies must be procured and installed in each system's Interface Electronics s fired from these platforms will perform as Stinger-RMP missiles, negating the Block I missi	lified. For MANPADS grips existing, fielded gripstocks. in each system's Interface E MP missiles, negating the E	stocks, new For Air-to-Air Electronics Block I missile
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	/ELOPMENT MILESTONES:	PLANNED	ACCOMPLISHED	
		Development has been completed.	een completed.	

					IND	VIDUAL	INDIVIDUAL MODIFICATION	CATIO	7						Date		February 1997	1997	
MODIFICATION TITLE (Cont):		STI	STINGER Platform Mods	Platf	orm M	spo		ő	OSIP# 1	твр									
FINANCIAL PLAN: (\$ in Millions)	FY 1996	[_c																	
	F	丩	FY 1997	97	FY 1998	398	FY 1999	Н	200	H	FY 2001	FY:	FY 2002	FY 2003	3003	TC		TOTAL	١L
	Q Çî	\$	Qfy	\$	Qty	s	Qfy	\$	Qty \$	Q Q	.y	Qty	\$	Qty	\$	Qţ	\$	Qty	\$
RDT&E																			
PROCUREMENT																			
Kit Quantity	0		2,425													0		2,425	
Installation Kits																			
Installation Kits Nonrecurring										·····									
Equipment		0.0		7.9													0.0		7.9
Equipment Nonrecurring																			
Engineering Change Orders																			
Data							-												
Training Equipment			-																
Support Equipment																			
Other			,													-			
Interim Contractor Support								-								·			
	-																		
Installation of Hardware								· 											
FY 1996 & Prior Eqpt Kits																			
FY 1997 Eqpt Kits																			
FY 1998 Eqpt Kits										·									
FY 1999 Eqpt Kits															······				
FY 2000 Eqpt Kits																			
FY 2001 Eqpt Kits		·				-													
FY 2002 Eqpt Kits							_												
FY 2003 Eqpt Kits									<u> </u>										
(FY(TC) Eqpt (xx kits)		\dashv																	
Total Installation Cost																			
Total Procurement Cost	0	0.0	2,425	7.9				\dashv								0	0.0	2,425	7.9
METHOD OF IMPLEMENTATION od Contract Dates:		FY 1997:	αı	ADMIN 2nd Qtr, FY97	DMINI: FY97	STRATI F	ADMINISTRATIVE LEADTIME: r, FY97 FY 1998:	TIME:	3 not a	3 Months not applicable	ths le	PRODUC FY 1999:	UCTION 19:	PRODUCTION LEADTIME: FY 1999:	OTIME: 18 not applicable		Months		
Delivery Date:	Ŧ	FY 1997:	4	4th Qtr,	FY98		FY 1998:		not ε	not applicable	<u>a</u>	FY 1999:	6	Ĕ	not applicable	able			
																			1

Installation Schedule: STINGER Platform Mods OSIP # TBD FY 1996 FY 1997 FY 1998 FY 1999	D ₂ FY 2000	Date	February 1997 FY 2001		
1 2 3 4 1 2 3 4 1	1 2 3	4	2	4	Total
Inputs FY 1996 & Prior FY 1997 EY 1008					2,425
FY 1999					
Outputs					
k Prior					
FY 1997 600 600 625					2,425
FY 1998					
FY 1999					
FY 2000 FY 2001 FY 2002	FY 2003		FY 2004	FY 2005	
1234123412341	1 2 3	4	8	4 1 2 3 4	Total
Inputs					
FY 2000					
FY 2001					
FY 2002					
FY 2003					
Outputs					
FY 2000					
FY 2001					
FY 2002					
FY 2003					
Remarks:					

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	INIONI	INDIVIDUAL MODIFICATION		Date February 1997	, 1997
MODIFICATION TITLE:	Bradley LINEBACKER	OSIP # TBD			
MODELS OF SYSTEMS AFFECTED:	Bradley Stinger Fighting Vehicle - Manpads Under Armor (BSFV-MUA)	ehicle - Manpads Under A	rmor (BSFV-MUA)		
PEROPIPTION / ILICTIFICATION					
The Bradley LINEBACKER, formerly the Bradley Stinger Fighting Vehicle-Enhanced (BSFV-E), is an air defense system based upon minimal upgrades to	nerly the Bradley Stinger Figh	ting Vehicle-Enhanced (BS	FV-E), is an air defense s	system based upon minimal up	grades to
the currently fielded BSFV-MUA. The Bradley LINEBACKER provides heavy maneuver forces with dedicated air defense against a variety of threat platforms. The Bradley LINEBACKER is a Non-Development Item rapid acquisition procurement to upgrade the existing BSFV-MUA with the addition of Bradley I INEBACKER modification kit. The kit includes an integrated extends the product of the	. The Bradley LINEBACKER ACKER is a Non-Developmen	I provides heavy maneuver t Item rapid acquisition proc	forces with dedicated air of the element to upgrade the element to upgrade the element Mohisis Mohisis	defense against a variety of the adsisting BSFV-MUA with the address of the addre	eat dition of
FAADS C21 Kit and the Bradley Fighting Vehicle-Operational Desert Storm Kit, which are being fielded separately by CECOM and TACOM. This materiel solution corrects major Air Defense Artillery deficiencies in survivability, fire control, target acquisition and identification with a reduction in crew size as a force savings.	ar missiles while the crew rem Fighting Vehicle-Operational Air Defense Artillery deficienc	tegrated, externary mounter lains under armor protection Desert Storm Kit, which are ies in survivability, fire cont	o standard vernicle Mount. The Bradley LINEBAC being fielded separately tol, target acquisition and	des an integrated, externative incomed Standard verticle Mounted Launcher with a modified life crew remains under armor protection. The Bradley LINEBACKER fielding maximizes the utility of the artional Desert Storm Kit, which are being fielded separately by CECOM and TACOM. This deficiencies in survivability, fire control, target acquisition and identification with a reduction in crew	lity of the s s n crew
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	VELOPMENT MILESTONES:				
			PLANNED	ACCOMPLISHED	
Contractor technical test and evaluation	i and evaluation		Feb-96	Mar-96	
Government technical test and evaluation	st and evaluation		Apr-96	Jul-96	
Operational test and evaluation	aluation		Sep-96	Sep-96	
Production decision			Nov-96	Nov-96	

				NON!	/IDUAL	INDIVIDUAL MODIFICATION	ATION						Date	ıfe		February 1997	, 1997	
MODIFICATION TITLE (Cont):	В	Bradley LINE	INEB	3ACKER	ا س	0	OSIP # TBD	ТВО										
FINANCIAL PLAN: (\$ in Millions)	EV 1006	-																
	and Prior	FY 1997	197	FY 1998	86	FY 1999	\vdash	FY 2000	FY	FY 2001	FY 20	2002	FY 2003	03	7	H	TOTAL	Ar.
	Oty \$	Qty	69	Qty	\$	Ωty	\$ Qty	\$ ^	Qţ	\$	QÎ QÎ	€9	Qty	\$	Qty	\$	Qfy	ss
RDT&E	8.8															18.0		26.8
PROCUREMENT																		
Kit Quantity	80	66		0		0					8		40		194		374	
Installation Kits					-													
Installation Kits Nonrecurring																		
Equipment	6.3		7.1		3.7		0.0					16.9		26.9		149.0		209.9
Equipment Nonrecurring																		
Engineering Change Orders	Proponency for Bradley LINI	or Bradle	y LINE	BACKE	3 was tr	ansferred	from Sti	EBACKER was transferred from Stinger PMO to Bradley PMO in FY97.) to Bra	dley PM	O in FY(7.						
Data	The Army will request the \$7.1M in FY97 be moved to Bradley PMO through Omnibus Reprogramming.	I request	the \$7.	1Min F∖	′97 be r	noved to	Bradley .	PMO thro	ugh Om	nibus R(progran	ıming.		_				
Training Equipment	FY98 and outyear funding will be used for additional Stinger Block I Upgrades (C21300) thereby reducing modification unit cost.	tyear fun	ding wil	be use	of for adu	Jitional St	inger Blo	ock I Upgr	ades (C	21300) 1	hereby r	educing	modific	ation un	it cost.		_	
Support Equipment		_									-							
Other																		
Interim Contractor Support																		
												 -		,				
Installation of Hardware	Insta	l Illation of	- Hardw	are cost	ו s are inc	 ui papnic	- Equipme	Installation of Hardware costs are included in Equipment above.	- _									
FY 1996 & Prior Eqpt - Kits																	,	
FY 1997 Eqpt Kits						.							-					
FY 1998 Eqpt Kits																		
FY 1999 Eqpt Kits						-												
FY 2000 Eqpt kits																		
FY 2001 Eqpt kits																		
FY 2002 Eqpt kits																		
FY 2003 Eqpt kits	<u>.,.</u>															-	-	
(FY(TC) Eqpt (xx kits)												1		+				
Total Installation Cost								_										
Total Procurement Cost	8 6.3	66	7.1	0	3.7	0	0.0				33	16.9	9	26.9	194	149.0	374	209.9
	1000	į			TAOT	ADMINISTRATIVE LEAD, TIME:	, TIME:	ď	Monthe	a	Cad	PRODUCTION LEAD. TIME	FAD.T	į.		er.	Months	
Contract Dates:	_	-		FY97	_ u_ 1	FY 1998:	힏	not applicable		.	FY 1999:		not applicable	able				
Delivery Date:	FY 1997:		2nd Otr, F	FY98	- ا	FY 1998:	og J	not applicable			FY 1999:	١	not applicable	aple				

Installation Schedule: Bradley LINEBACKER	tule: Bra	adley	LINE	BAC	Œ	U	SIP#	OSIP # TBD	_								Date		Fet	February 1997	2				
	FY 1996		Ę	FY 1997			Ŧ	FY 1998			F	FY 1999			FΥΣ	FY 2000			FY 2001	001					
	& Prior	-	CI	හ	41	-1	αŧ	ଠା	41	-	αį	ଠା	41	⊣	<4	က	41	-1	Ø	က	41				Total
Inputs																									
FY 1996 & Prior	œ																								
FY 1997			-	-			9	စ္တ	27																
FY 1998																									
FY 1999																									
Outputs																									
FY 1996 & Prior	80											٠													
FY 1997				-	-		8	30	30	7															66
FY 1998																									
FY 1999																									
			FY 2000	2			FY 2001	5			FY 2002	Ŋ			FY 2003	છ			FY 2004	4		ш	FY 2005		
		-	Ø	ო	4	-	8	က	4	-	8	က	4	-	8	ဗ	4	-	α	က	4	_	2	დ 4	Total
Inputs																	٠								
FY 2000																									
FY 2001																									
FY 2002											œ	80	80	6											33
FY 2003															9	9	10	9							40
Sindino																									
FY 2000																									
FY 2001																									
FY 2002													80	8	80	6									33
FY 2003																	9	9	9	10					40
Remarks:																									

						11.4		
	BUI	BUDGET ITEM JUSTIFICATION SHEET	TIFICATION SHI	EET		DATE	February 1997	
APPROPRIATION / BUDGET ACTIVITY	ACTIVITY			P-1 ITEM NOMENCLATURE	tu			
MISSILE	PROCUREMENT	MISSILE PROCUREMENT /Modification of	Missles			ITAS/TOW MODS (C61700)	DS (C61700)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	40.7	00	8 69 8	63.8	64.4	63.8	2.79	59.9

software serves to increase gunner proficiency over that of the previous TOW system. ITAS will support the U.S. Army mission of crisis response to DESCRIPTION: TOW Improved Target Acquisition System (ITAS) program is a technology insertion program to upgrade the current TOW Target Acquisition and Fire Control Subsystems. The TOW ITAS will provide improved target detection and acquisition range, improved probability of hit Assembly (SADA) II technology to detect and recognize enemy targets day or night at greater ranges and with greater resolution. This allows the developed for ITAS horizontally applies to Bradley TOW upgrades. ITAS takes advantage of state of the art infrared Standard Advanced Dewar gunner to utilize TOW's maximum effective range, increasing lethality and survivability against armor and other targets. The embedded training and enhanced fire control capabilities that will upgrade the anti armor capability of light forces using the TOW system. Technology insertion regionally based threats and allows for TOW to continue to be integral to the strategic principle of CONUS based force projection.

The missile modification (MOIC) Materiel Change (MC) provides/installs MOICs (safety requirement) on Basic/ITOW heat missiles used for training. The MOIC precludes flight motor ignition and S&A arming in the event of missile malfunction.

The objective of missile conversion and modification is to maintain a continuous source for training by utilizing out-of-production missiles (Basic TOW extended Range ITOW, rather than procuring training missiles). Mod kit procurement will continue until these missiles are depleted. The missile conversion MC converts Basic/ITOW heat missiles to practice missiles by replacing the heat warhead with a practice warhead. It also provides for a Missile Ordnance Inhibit Circuit (MOIC-Safety Requirement) and an epoxy coated T250 maraging steel launch motor.

Ground/HMMWV-Mounted TOW 2 System. ITAS also provides for growth potential for next generation missile. Funding is also required to maintain and fire control subsystems. This enhances Army posture against regionally based threats, promotes effective crisis response and increases overall the production of the above essential MCs. These MCs are necessary to meet training/safety standards and upgrades the current TOW acquisition JUSTIFICATION: Funding is required for the ITAS program, which upgrades the detection recognition and fire control capabilities of the current

_		_	_
DATE	February 1997		ITAS/TOW MODS (C61700)
	EET	P-1 ITEM NOMENCLATURE	
	BUDGET ITEM JUSTIFICATION SHEET	OPRIATION / BUDGET ACTIVITY	MISSILE PROCUREMENT /Modification of Missles

·		BUDGEI II EM JUSTIFI	IIFICATION SHEET			Fe	February 1997	
APPROPRIATION / BUDGET ACTIVITY MISSILE PROC	ION / BUDGET ACTIVITY MISSILE PROCUREMENT /Modification of		P-1 ITE Missles	P-1 ITEM NOMENCLATURE	-	ITAS/TOW MODS (C61700)	s (C61700)	
OSIP No.	Description							
Classification	All Priors	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
MC-1-82-03-302(MC-1-82-03-3020 MISSILE CONVERSION(HEAT TO PRACTICE)	RSION(HEAT TO I	PRACTICE)					
SAFETY	34.3	0.0	0.0	1.6	0.0	0.0	0.0	5.6
MC-1-82-03-3021	MC-1-82-03-3021 MISSILE MODIFICATION(MOIC)	CATION(MOIC)						
SAFETY	13.5	0.0	0.0	0.4	0.0	0.0	0.0	0.4
MC-1-89-03-3026	MC-1-89-03-3028 ITAS(IMPROVED TARGET ACQUISITION SYSTEM)	TARGET ACQUIS	ITION SYSTEM)					
OPERATIONAL	36.0	0.0	62.8	61.8	64.4	63.8	67.7	53.9
TOTALS	83.8	0.0	62.8	63.8	64.4	63.8	67.7	59.9
								-
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				a principal de la constant de la con				
		1,000	The state of the s					
					The state of the s	and and an analysis of the		

	2	MODIFICATION INSTALLATION SUMMAR Date	ATION IN	STALL/	NOIT	JMMAR		February 1997	266
			(TOA, Dollars in Millions)	ollars in	Millions)	•			
	Prior								
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
ITAS/TOW MODS C61700 MISSILE CONVERSION(HEAT TO PRACTICE) MISSILE MODIFICATION(MOIC) ITAS(IMPROVED TARGET ACQUISITION SYSTEM)	12.6 4.3 0.0	0.00	0.0	1.6 0.4	0.0	0.0	0.0	0.9 0.0 0.5	15.1 4.7 1.5
Totals	16.9	0.0	0.1	2.1	0.2	0.3	0.3	4.1	21.3

					IQNI	VIDUAL	MODIF	INDIVIDUAL MODIFICATION							Date		Februa	February 1997	
MODIFICATION TITLE (Cont):		Σ	MISSILE CON	loo 	IVERS	H)NOI	EAT T(VERSION(HEAT TO PRACTICE) MC-1-82-03-3020	CTICE) MC	-1-82-(33-302	ု ္င						-
FINANCIAL PLAN: (\$ in Millions)	EV 4006	90																	
	and Prior	rior	FY 1	1997	FY 19	1998	FY 1999	-	FY 2000	_	FY 2001	F	FY 2002	-	FY 2003		TC	TOTAL	٩Ľ
	Qty	ક્ર	Qty	ક	Q Qfy	s	Öţ	⊙ \$	Oty 8	\$	Qty	\$	Oty 8	\$ Oty	\$	ð	₩	Öţ	÷
RDT&E PROCUREMENT Kit Quantity Installation Kits Installation Kits											·								
Equipment Equipment Nonrecurring Fraineering Change Orders	60213	21.7								 				4977	77 4.7			65190	26.4
Data											· · · -								
Training Equipment Support Equipment																			
Other Interim Contractor Support												· · · · · · · · · · · · · · · · · · ·							
Installation of Hardware								-											
FY 1996 & Prior Eqpt Kits FY 1997 Eqpt Kits	55213	12.6					3328	9:			<u>.</u>			16	1672 0.	6.0		60213	15.1
FY 1998 Eqpt Kits FY 1999 Eqpt Kits																			
FY 2000 Eqpt kits																			
FY 2002 Eqpt kits											. <u>-</u>								
FY 2003 Eqpt kits																4977	2.7	4977	2.7
(FY(TC) Eqpt - kits Total Installation Cost	55213	12.6					3328	1.6				+		16	1672 0	0.9 4977	7.2.7	65190	17.8
Total Procurement Cost		34.3				H	H	1.6	H		H	H	H	H	2	5.6	2.7		44.2
METHOD OF IMPLEMENTATIOI Depot Team	Depot	Team			ADMIN	STRATI	ADMINISTRATIVE LEADTIME:	OTIME:	N	24 Mc	Months	ğ.	TODUCT	PRODUCTION LEADTIME:	\DTIME	15	Months		
Contract Dates: Delivery Date:	FY 97 FY 97					ш Ш	FY 1998: FY 1998:		1098			((<u>)</u>	FY 1999 FY 1999						

Installation Schedule: MISSILE CONVERSION(HEAT TO PRACTICE) MC-1-82-03-3020	lle: MISSII	LE CON	VER)NOIS	HEAT	TO P	JACT	CE) N	1C-1-	32-03-0	3020				Date		Feb	February 1997	1997				
	FY 1996	Ŧ	FY 1997			FY 1998	86		_	FY 1999			Œ	FY 2000			Ŧ	FY 2001					
	& Prior 1	CI	ର	41	-1	01	ଠା	41	-	2 3	41		2	rO)	41	Н	C 4	ကျ	41				Total
Inputs																							
FY 1996 & Prior	10950				3000	3000 2000																	15950
FY 1997																							
FY 1998																							
FY 1999																							
<u> </u>																							
Outputs	24700							Ť	7	Ş													2001
EV 1007	3							_	1004	5 00													2503
1 1 1 2 2 1																							
FY 1996																							
6661																							
		FY 2000	8		_	FY 2001			F	FY 2002			FY 2003	203			FY 2004	2		Ŧ	FY 2005		
		1 2	က	4	-	α	က	4			ဗ	4		2	4	-	0	ო	4	-	2	4	4 Total
Inputs																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003																							. "
Outputs																							
FY 2000*												836	6 836	"									1672
FY 2001																							
FY 2002																							
FY 2003																							
Remarks:																							
* FY 96 HARDWARE	뽔																						

					ĭ	JIVIDU,	AL MOD	INDIVIDUAL MODIFICATION	N O							Date	ľ	-eprua	February 1996	
MODIFICATION TITLE (Cont):		2	MISSILE MOD	E MC		ATION	J(MOIC	FICATION(MOIC) MC-1-82-03-3021	1-82-0	3-302	_									
FINANCIAL PLAN: (\$ in Millions)) EV 1008	90	_											ĺ		:				
	and Prior	2	FY 1997	<u>*</u>	FY 1998	8	FY 1	FY 1999	FY 2000	000	FY 2001	901	FY 2002	202	FY 2003	503	2		TOTAL	Ā
	ģ	\$	Qty	\$	Q.	\$	Q ty	€9	Qty	\$	δ	89	Qty	s	S S	\$	ot St	8	ş	8
RDT&E																				
PROCUREMENT																				
Kit Quantity																	,			
Installation Kits																	,	,		
Installation Kits Nonrecurring																				
Equipment	35667	9.5													1000	4.0			36667	9.6
Equipment Nonrecurring									•							·				
Engineering Change Orders															-			, ,		
Data			_																	
Training Equipment																				
Support Equipment													-							
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1996 & Prior Eqpt Kits	34667	4.3					1000	0.4											35667	4.7
FY 1997 Eqpt Kits										_										•
FY 1998 Eqpt Kits																				
FY 1999 Eqpt Kits																				
FY 2000 Eqpt kits																				,
FY 2001 Eqpt kits																				
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits								_									1000	0.5	1000	0.5
(FY(TC) Eqpt Kits																		?)
Total Installation Cost	34667	4.3					1000	0.4							-		1000	0.5	36667	5.2
Total Procurement Cost		13.5						0.4		П		П				0.4		0.5		14.8
THE CONCERNING TOWN TO CONTENT							Į.		_		:	•		į	1	!		,		
Contract Dates:	· Depot	. redii! EV 1007:	ĸ			K I	V E A	ADMINISTRATIVE LEADTIME:	::	4	Months		PRODUCTION LEADTIME:		EAD	Ξ ij	Z Z	Months		
Delivery Date:	Lu	FV 1007				2002	FY 1990.	ċċ					TY 1999:				•			
Delivery Date.	-	188	ای			1800	881 L						-Y 1999							

Exhibit P-3a Individual Modification

FY 1996	Installation Schedul	le: MISS	ILE	MOD)FIC	ATIO	N N	(OIC	MC-1	-82-0	3-302	-						Date		Fe	February 1997	/ 199	7				
2 3 4 1 2 3 4 1 2 3 4 250 250 250 250 FY 2002 FY 2003 FY 2004 FY 2005 A 1 2 3 4	ŭ.	:Y 1996		FY 19	197		•	` ₹	1998				1999			Ē	/ 2000			Œ	/ 2001						
8 Prior 2050 1000 250 250 250 250 250 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1		& Prior 1		C4	(C)	41	-	Ø	ଠା	41	-					αI		41									Ď
8 Prior 2050 1000 8 Prior 2050 1 2 3 4 1 3 3 4 3 4	Inputs																										
8 Prior 2050 FY 2000 FY 2001 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2	FY 1996 & Prior	2050					100	_																			ଚ
8 Prior 2050 FY 2000	FY 1997																										
8 Prior 2050 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 1 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FY 1998																										
8 Prior 2050 EY 2000 EY 2001 EY 2002 EY 2003 EY 2004 EY 2005 1 2 3 4 1	FY 1999																										
8 Prior 2050 FY 2000 FY 2000 FY 2000 FY 2004 FY 2005 FY 2006 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 1 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Outputs																										
FY2000 FY2001 FY2002 FY2003 FY2004 FY2005 1 2 3 4 1 2	-Y 1996 & Prior	2050									53				5												8
FY2000 FY2001 FY2002 FY2003 FY2004 FY2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3	FY 1997																										
FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 1 1 2 3 1 1 1 2 3 1 1 1 2 3 1 1 1 2 3 1 1 1 2 3 1 1 1 1	=Y 1998																										
FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3	-Y 1999																										
 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 3 4 1 3 3 4 3 4			ÍĿ	Y 2000	0			FY 2	001			FY 2	2002			FY 2	2003			FY	3004			ΕŢ	2005		
ηφυίs γ 2000 γ 2001 γ 2002 γ 2003 μυτρυίs γ 2000 γ 2001 γ 2000 γ 2001 γ 2002 γ 2002 γ 2003 γ 2003 γ 2003 γ 2003 γ 2003			-	01	က	4		_	8	က	4	-		က	4	-			4	_		ဗ	4	-	7	က	4 <u>Io</u>
-Y 2000 -Y 2001 -Y 2002 -Y 2003 -Y 2000 -Y 2000 -Y 2001 -Y 2001 -Y 2002 -Y 2003 -Y 200	nputs																										
Y 2002 Y 2003 Y 2003 Y 2003 Y 2000 Y 2001 Y 2001 Y 2002 Y 2003 Y 2003 Y 2003	۲۰ عمرہ ۲۰																										
-Y 2002 -Y 2003 -Y 2000 -Y 2000 -Y 2001 -Y 2002 -Y 2003 -Y 2003 -Y 2003 -Y 2003 -Y 2003	-Y 2001																										
Y 2003 Y 2000 Y 2000 Y 2002 Y 2002 Y 2003 FY 2003 FY 2004	-Y 2002																										
□ Utputs -Y 2000 -Y 2001 -Y 2002 -Y 2003 -Y 2003 -Y 2003 -Y 2003 -Y 2003 -Y 2009	-∀ 2003																										
-Y 2001 -Y 2002 -Y 2003 -Y 2003 -Y 2003 -Y 2003	Outputs																										
=Y 2001 =Y 2002 =Y 2003 =Yemarks:	-Y 2000																										
=Y 2002 =Y 2003 Gemarks:	-Y 2001																										
FY 2003 Remarks:	FY 2002																										
Remarks:	FY 2003	!																									
	Remarks:																										

				Z	DIVIDU	INDIVIDUAL MODIFICATION	IFICATI	NO						Ğ	Date		February 199	y 1997	
MODIFICATION TITLE (Cont):		ITAS(ITAS(IMPROV		rarg	ED TARGET ACQUISITION SYSTEM) MC-1-89-03-3028	TISINE	S NOL	YSTE	M) MC	-1-89	03-30	58						
FINANCIAL PLAN: (\$ in Millions)	FY 1996	Г																	
	and Prior	Ĺ	FY 1997	<u>F</u>	1998	FY	1999	FY 2	2000	FY 20	2001	FY 20	2002	FY 2003	83	1		TOTAL	AL.
	Oty \$	Qty	\$	ğ	ક્ક	ğ	\$	Š	€	φ	ક્ર	Ŏţ <u>Ŷ</u>	\$	Qty	S	ξį	છ	Ş Ö	€
RDT&E	104.6	<u>ю</u> .		-															104.7
PROCUREMENT																-			
Kit Quantity	52			61		92		112		128		150		117	-	372		1057	
Installation Kits																			
Installation Kits Nonrecurring											_		*						
Equipment	ਲ —	31.3	· · ·		52.0	_	46.4		51.2		53.6		60.4		48.5		151.8		495.2
Equipment Nonrecurring			· · · · · · · · · · · · · · · · · · ·																
Engineering Change Orders																			
Data		0.7			0.8	<u>~</u>	0.8		9.0		0.2		0.5		0.5		0.5		4.0
Training Equipment		7:			3.8	<u> </u>	4.4		5.2		5.4		6.4		4.3		15.4		47.6
Support Equipment					2.5	10	7.6		0.0		4.0								20.1
Other		1.3			2.1		1.0		1.2		0.3		0.4		0.4		0.8		7.5
Interim Contractor Support					75.	10	1.5												3.0
-																			
Installation of Hardware																			
FY 1996 & Prior Eqpt Kits				16	3 0.1	6												22	0.1
FY 1997 Eqpt Kits																			
FY 1998 Eqpt Kits						20	0.1	F										6	0.1
FY 1999 Eqpt Kits								92	0.2	16	0.1							92	0.3
FY 2000 Eqpt kits										95	0.5	8	0.1					112	0.3
FY 2001 Eqpt kits	-											106	0.2	22	0.1			128	0.3
FY 2002 Eqpt kits										•				124	4.0	56	0.1	150	0.5
FY 2003 Eqpt kits																117	0.3	117	0.3
(FY(TC) Eqpt (xx kits)											_					372	0.9	372	0.9
Total Installation Cost				16	3 0.1	69	0.1	48	0.2	108	0.3	126	0.3	146	0.5	515	1.3	1057	2.8
Total Procurement Cost	36	36.0			62.8		61.8		64.4		63.8		67.7		53.9		169.8		580.2
AATT TOOLO JACITATIATIATI GAAL TO COLLETA	F C C C	3		•	, CH		A DITINA	į	ç	4	_	- A DELICATION OF A DELINATE.	Į.	T C A D	ij	;	Months		
METHOD OF IMPLEMENTATION. Contract Dates:		71 LEAN FY 1997:				FY 199		1098		MOLITICA	- 4	7 7 1999	- - - -	1099	j				
Delivery Date:	Ŧ	FY 1997:				FY 1998:		1099				FY 1999:		1000					

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FY2000 FY2001 FY2002 FY2003 FY2004 FY2005 FY2005 FY2004 FY2005 FY2006 FY	FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 200	FY 2000 FY 2001 FY 2001 FY 2002 FY 2003 FY 2004 FY 2004 FY 2005 FY 2004 FY 2005 FY 2004 FY 2005 FY 2004 FY 2005 FY 2004 FY 2005 FY 2004 FY 2005 FY 2004 FY 2005 FY 200
FY 2000	FY 2000	FY2000 FY2001 FY2001 FY2002 FY2003 FY2003 FY2004 FY2004 FY2003 FY2004 FY
FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 200	FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2006 FY 2007 FY 200	FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2004 FY 2006 FY 2006 FY 2007 FY
FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 200	FY 2000	FY 2000 FY 2001 FY 2001 FY 2001 FY 2002 FY 2003 FY 2004 FY 200
FY2000 FY2001 FY2001 FY2002 FY2003 FY2004 FY2005 FY	FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 200	FY 2000 FY 2001 FY 2001 FY 2002 FY 2003 FY 2004 2 3 4 1 3 4 1 3 4
FY 2000 FY 2001 FY 2003 FY 2004 FY 2004 FY 2005 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 3 3 4 1 3 3 4 1 3 3 4 1 3 3 4 1 3 3 4 1 3 3 4 1 2 3 4 1 2 3 4 1 3 3 4 1 3 3 4 1 3 3	FY 2000 FY 2001 FY 2003 FY 2003 FY 2004 FY 2005 FY 2005 FY 2006 FY 2005 FY 2005 FY 2006 FY 2005 <t< td=""><td>FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 2 3 4 1 2 3 4 1 2 3 4 1 2 27 27 27 28 30 32 33 33 33 33 33 33 33 33 33 30<</td></t<>	FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 2 3 4 1 2 3 4 1 2 3 4 1 2 27 27 27 28 30 32 33 33 33 33 33 33 33 33 33 30<
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27 28 30 32 33 33 34 36 36 39 39 39 39 30 30 30 30 27 31 32 33 33 22 33 33 22 34 35 39 39 39 30 30 30 30 30 30 30 30 30 30 30 30 30	27 28 30 32 33 33 27 27 29 20 27 27 29 20 10 30 33 32 10 30 33 32 12 36 37 39 26 10 30 33 32 10 30 30 20 10 30 30 29 10 30 30 29 18	27 28 30 30 32 33 33 36 36 39 39 30 30
27 28 30 32 33 33 34 35 36 36 39 39 39 26 27 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	27 28 30 32 33 33 33 34 35 36 36 39 39 39 39 39 39 30 30 30 30 30 30 30 30 30 30 30 30 30	27 28 30 30 32 33 33 36 36 39 39 30 30
27 27 29 20 10 30 33 33 22	27 27 29 20 10 30 33 33 22 12 36 37 39 36 36 39 39 30 30 30 30 30 37 30 30 30 30 30 30 30 30 30 30 30 30 30	32 33 33 36 36 39 39 30 30
27 27 29 20 10 30 33 33 22 12 12 36 37 39 26 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10	27 27 29 20 10 30 33 22 12 36 37 39 26 19 30 30 30 30 30 30 30 30 30 30 30 30 30	30 39 39
27 27 29 20 10 30 33 22 12 36 37 39 26 12 36 37 39 26 12 36 37 39 26	27 27 29 20 10 30 33 22 12 36 37 39 26 12 36 37 39 26 10 30 30 29 18	30
27 27 29 20 10 30 33 33 22 12 36 37 39 26 10 30 30 29 18	27 27 29 20 10 30 33 33 22 12 36 37 39 26 10 30 30 29 18	
27 27 29 20 10 30 33 33 22 12 36 37 39 26 10 30 30 29 18	27 27 29 20 10 30 33 33 22 12 36 37 39 26 10 30 30 29 18	
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36 37 39 26 10 30 30 29 18	36 37 39 26 10 30 30 29 18	30 33 33
30 30 29 18	30 30 29 18	36 37 39
		တ္ထ

Exhibit P-40	Budget Item Justification Sheet

						DATE		
	BUE	BUDGET ITEM JUST	TIFICATION SHEET	ЕЕТ			February 1997	
APPROPRIATION / BUDGET ACTIVITY	TIVITY			P-1 ITEM NOMENCLATURE	ш			
2	MISSILE PROCUREMENT Modification of Missiles	Modification of Missiles				MLRS MODS (C67500)	S (C67500)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	27.5	6.4	2.2	2.2	2.3	2.6	2.6	2.5
								,

DESCRIPTION: Modification kits are procured for previously manufactured MLRS launchers and the associated training and ground support equipment. The following page provides a list of approved modifications.

DATE	February 1997		MLRS MODS (C67500)
	BUDGET ITEM JUSTIFICATION SHEET	APPROPRIATION / BUDGET ACTIVITY	MISSILE PROCUREMENT Modification of Missiles

Oeto Mo								
Classification	Description All DVs	EV 4007	1000	10007	2000 77	7000		
Josephication	81418	1881 1.	r 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
1-84-03-0502	Improved Electronic Unit (IEU)	ic Unit (IEU)						
	71.5	0.7	0.5	0.5	0.6	9.0	0.7	0.7
1-85-03-0508	Launcher Loader	Launcher Loader Module Improvements (LLM)	ents (LLM)	200				
	33.5	0.2	0.0	0.0	0.0	0.0	0.0	C
1-85-03-0509	Improved Launche	Improved Launcher (Deep Attack) Modifications	odifications					
	37.5	0.0	0.0	0.0	0.0	0.0	0.0	C
1-94-03-0520	Carrier Improvements Phase IV	ents Phase IV	THE PERSON NAMED IN COLUMN NAM					
	3.3	0.1	0.0	0.0	0.0	0.0	0.0	0
1-94-03-0522	Transmission Elec	Transmission Electronic Controller (TEC)						5
	26.3	0.0	0.0	0.0	0.0	0.0	0.0	0
1-94-03-0525	Fire Suppression Change	Change				,		
	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.0
1-94-03-0528	Interim IPDS Launcher							5
	16.2	2.2	0.5	0.5	0.6	9.0	0.7	0.7
1-94-03-0529	Interim MS Launcher							
	6.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1-95-03-0530	Hoist Carriage Assembly	sembly						5
	3.8	6.0	0.0	0.0	0.0	0.0	0.0	0
1-95-03-Obsc	Obsolescence Miti	Obsolescence Mitigation/ECP Reliability Integration	ility Integration					
And the state of t	2.2	1.4	1.0	1.0	1.0	1.3	1.1	1.0
Totals	204.2	6.4	2:2	2.2	23	9.6		0 A
						j	Si	
		The second secon						
			i					
				524				
						-		

							Date		
			į					February 1997	97
MODIFICATION INSTALLATION SUMMARY	à		(TOA, D	(TOA, Dollars in Millions)	Millions)				
System/Modification	EY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
MLRS MODS									
C67500									
Improved Electronic Unit (IEU)	0.7	0.0			0.0		0.0	0.0	0.7
Launcher Loader Module Improvements (LLM)	11.3	0.0			0.0				11.3
Improved Launcher (Deep Attack) Modifications	4.8	0.0	0.0	0.0	0.0	0.0			4.8
Carrier Improvements Phase IV	2.2				0.0				2.3
Transmission Electronic Controller (TEC)	7.4				0.0				7.4
Fire Suppression Change	0.0				0.0				0.3
Interim IPDS Launcher	0.0				0.0			_	0.0
Interim MS Launcher	0.0				0.0				0.0
Hoist Carriage Assembly	0.5				0.0			0.0	4.1
Obsolescence Mitigation/ECP Reliability Integration	0.0				0.0				0.0
	0 90		č	Ċ	0				28.2
Totals	26.9	<u> </u>	0.1	0.1	0.0	0.0	0.0	0.0	

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	INDIVIDUAL MODIFICATION Date Febru	February 1997
MODIFICATION TITLE:	Improved Electronic Unit (IEU) 1-84-03-0502	
MODELS OF SYSTEMS AFFECTED:	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)	
DESCRIPTION / JUSTIFICATION: This improvement increases the operational capak missile and rocket programs. The IEU expands th 32K RAM to 612 DRAM. Six computer interface p incorporated which enhance flexibility to accommore reprogrammable software and can be updated by Test Program Set (TPS) support equipment consist (BSTS) and Integrated Family of Test Equipment	ESCRIPTION / JUSTIFICATION: This improvement increases the operational capability of the existing Version 4.0 software to provide the necessary growth capability for new missile and rocket programs. The IEU expands the operational memory capability of the MLRS Fire Control System (FCS) from 96K ROM and 32K RAM to 612 DRAM. Six computer interface ports, an internal magnetic bubble memory, and three more efficient minicomputers are incorporated which enhance flexibility to accommodate planned and potential warhead growth programs. The IEU allows usage of Version 6.0x reprogrammable software and can be updated by the user with a portable Program Load Unit (PLU). The Line Replaceable Unit (LRU) Test Program Set (TPS) support equipment consists of software, hardware and documentation used in conjunction with Base Shop Test Stations (BSTS) and Integrated Family of Test Equipment (IFTE) to detect and isolate LRU failures.	new DM and e ion 6.0x t Stations
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	FELOPMENT MILESTONES:	
	PLANNED ACCOMPLISHED Development complete - Incorporated into current production.	roduction.

					2	IVIDUAL	INDIVIDUAL MODIFICATION	ICATIO	z						Date	9,		February 1997	y 1997	
MODIFICATION TITLE (Cont):		盲	nprove	d Elec	stronic	Unit (I	Improved Electronic Unit (IEU) 1-84-03-0502	84-03-	0502											
FINANCIAL PLAN: (\$ in Millions)																				
	PY 1996	Prior	FY 1997	266	FY 1998	866	FY 1999	66	FY 2000	8	FY 2001	 -	FY 2002	12	FY 2003	33	TC		TOTAL	AL
	Qty	s	Oty	\$	Qt	€9	Q Ç	€	Qfy	\$	Qty	\$	Öţ	\$	Qfy	\$	Qţ	\$	Öţ	\$
RDT&E																				
PROCUREMENT																				
Kit Quantity							.,					-					_	-		
Installation Kits																			-	
Installation Kits Nonrecurring																				
Equipment	998	36.6												-					998	36.6
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment								-												
Support Equipment*		34.2		0.7		0.5		0.5		9.0		9.0		0.7		0.7				38.5
Other										·										
Interim Contractor Support																				
Installation of Hardware																				
FY 1996 & Prior Eqpt 866	998	0.7													•		<u></u> .		866	0.7
FY 1997 Eqpt Kits																				
FY 1998 Eqpt Kits						_														
FY 1999 Eqpt Kits																				
FY 2000 Eqpt kits																				
FY 2001 Eqpt kits																				
FY 2002 Eqpt kits														<u>.</u>						
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	998	0.7																	998	0.7
Total Procurement Cost		71.5		0.7		0.5		0.5		9.0	\dashv	9.0	_	0.7	\dashv	0.7				75.8
		i	-	!		+ C	- 1	1		3	4	Ĉ	2	TANET OF THE PARTY.	1	į	4	4444		
METHOD OF IMPLEMENTALION Depot Field Application	N Depot	Field #	opplicati	.	AUMIN	N N	ADMINISTRATIVE LEADTIME:			ž	Months	LÚ				ij	2	MOUTE		
Contract Dates:		FY 1997:	: i			-	FY 1998:					LÚ	1 333.							
Delivery Date:		FY 1997:					FY 1998:					<u>ا</u> ا	FY 1999.							

Installation Schedule: Improved Electronic Unit (IEU) 1-84-03-0502	Jule: Imp	roved E	Electro	inic U	nit (E	U) 1-8	4-03-0	502							Date			February 1997	1997				
	FY 1996	ĬL.	FY 1997		•	F	FY 1998			FY 1999	66		_	FY 2000			Ĭ.	FY 2001					
	& Prior	1 2	(C)	41		C/I	ଚା	41	-	%	ଠା	41	 1	21	41			ෆ	41				Total
Inputs																							
FY 1996 & Prior	998																						866
FY 1997																							
FY 1998																							
FY 1999																							
Outputs																							
FY 1996 & Prior	998																						866
FY 1997																							
FY 1998																							
FY 1999																							
		ΕŢ	FY 2000			FY 2001	100		_	FY 2002			Ŧ	FY 2003			FY,	FY 2004		<u></u>	FY 2005		
		-	8	ဗ	4	1 2	eo	4	-	8	ဗ	4	-	8	ဗ	4	_	2	3 4		Ŋ	က	4 Total
Inputs																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003																							
Outputs																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003															,								
Remarks:																							
*TPS Support Equipment does not require installation funding.	uipment does	not requ	ire ins	allation	n fundir	ğ																	

2.			and or to	
February 1997			structure tight coverses see ttion	Development complete - Incorporated into current production.
			her cage moisture ost. Th	Development complete -
Date			ont launcl provides corner p ling. This	ACCOMPLISHED Development or Incorporated int
			ESCRIPTION / JUSTIFICATION: This modification retrofits fielded vehicles for the following: Adds new metal blast panels to prevent damage to front launcher cage structure and blast doors; installs new environmentally sealed limit switches; welds in stiffening plate to motor pump assembly; provides moisture tight cover to the azimuth resolver; and adds support lugs and welds to the upper elevation actuator attach fitting to improve aft corner post. These improvements are required to correct operational deficiencies identified during OT-III testing and subsequent fielding. This modification accomplishes retrofit of the fielded vehicles as part of the Block Mod Effort in conjunction with MC 1-85-03-0507.	
			following: Adds new metal blast panels to prevent damage to free limit switches; welds in stiffening plate to motor pump assembly; a welds to the upper elevation actuator attach fitting to improve af al deficiencies identified during OT-III testing and subsequent fielt oart of the Block Mod Effort in conjunction with MC 1-85-03-0507.	
	3-0508		lels to pre e to moto r attach fi testing ar tion with I	PLANNED
	M) 1-85-0	ILRS)	blast pan ining plati n actuato ig OT-III i	
INDIVIDUAL MODIFICATION	Launcher Loader Module Improvements (LLM) 1-85-03-0508	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)	ew metal is in stiffe celevation iffied durir d Effort ir	
DUAL MOI	mproven	CKET SY	: Adds no thes; welk the upper sies ident Block Mo	
INDIN	Module	VCH RO	following imit switc welds to deficient after of the lut of the lut	ONES
	r Loader	LE LAUN	s for the t sealed li ugs and v erational les as pa	AT MILEST
	Launche	MULTIP	ESCRIPTION / JUSTIFICATION: This modification retrofits fielded vehicles for the blast doors; installs new environmentally sealed the azimuth resolver; and adds support lugs and improvements are required to correct operations accomplishes retrofit of the fielded vehicles as p	DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:
		ECTED:	its fielder wenviror and adds uired to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continued to continue	IAJOR DEL
	T.E.	MODELS OF SYSTEMS AFFECTED:	DESCRIPTION / JUSTIFICATION This modification retrofits f blast doors; installs new er the azimuth resolver; and a improvements are required accomplishes retrofit of the	TATUS/N
	MODIFICATION TITLE:	S OF SYST	PTION / JI modificat doors; in zimuth re wements mplishes	DPMENT S
	MODIFIC	MODELS	DESCRI This r blast the a: impro accor	DEVELC

					IND	NIDUA	INDIVIDUAL MODIFICATION	FICATIO	NC							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		7	aunch	Launcher Loader Module Improvements (LLM) 1-85-03-0508	der Mc	dule	mprov	emen	IS (LLI	M) 1-8(5-03-0	508								
FINANCIAL PLAN: (\$ in Millions)	L	FY 1996																		
	and	and Prior	Ŧ	FY 1997	FY 1998	866		1999	FY 2000	000	FY 2001	201	FY 2002	002	FY 2003	003	TC		10	TOTAL
RDT&E	Š	•	ŝ	₽	}	₩.	è	69	ð	69	ð	φ	ð	₽	ĝ	₩	ð	↔	ð	€
PROCUREMENT						•											•			
Kit Quantity																				-
Installation Kits Installation Kits Nonrecurring																				
Equipment	433	22.2						•											433	22.2
Equipment Nonrecurring									-						•	-				
Engineering Change Orders																				
Data Training Equipment																				
Support Equipment				0.2																0.2
Other							· <u> </u>													
Interim Contractor Support								···										-		
							•		• • • • • • • • • • • • • • • • • • • •											
Installation of Hardware																				
FY 1996 & Prior Eqpt 433	433	11.3													•				433	11.3
FY 1997 Eqpt Kits							-		***							•				
FY 1998 Eqpt Kits																				
FY 1999 Eqpt Kits																				
FY 2001 Eapt kits																				
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)															-					
Total Installation Cost	433	11.3										ļ							433	11.3
Total Procurement Cost		33.5		0.2																33.7
METUDO OCIUDITATIVA I INCITATIV	100	7	1			i	į	1		•	:					!	•	:		
Contract Dates:		гівіа Арс FY 1997:	pplication 7:		ADMINISTRATIVE LEAUTIME: FY 1998:	Z Z	IVE LEAI FY 1998:			2	Months	<u> </u>	FHOUD FY 1999	<u>S</u>	PRODUCTION LEADTIME: FY 1999:	.: ≅		Months		
Delivery Date:	_	FY 1997:	::				FY 1998:					. ш	FY 1999:							
		ı					I						I		-					

Installation Schedule: aurocher cader Module Improvements (1 M) 1-85-03-0508	e: a	- Johor	Pao I	Pr Mo	اعادا	m Dr. C	Veme	nts (I	\ <u>-</u>	85-03	-0508	<u> </u>				Date			February 1997	1997					
LL.	FY 1996	2	FY 1997		3	}	FY 1998	38	·	, L	FY 1999	, G		Ĺ	FY 2000			Œ	FY 2001						
			ঝ	(C)	41	+1	01		41	-1	OI.		4		ကျ	41	+-		හ	41					Total
Inputs																									
FY 1996 & Prior	433																								433
FY 1997																									
FY 1998																									
FY 1999																									
Orithalite																									
FY 1996 & Prior	433																								433
FY 1997																									
FY 1998																									
FY 1999																									
		Ĺ	FY 2000			ш	FY 2001			ቻ	FY 2002			FΥ	FY 2003			FΥ	FY 2004			FY 2005	900		
		-	8	က	4	-	01	ဗ	4	-	8	ო	4	_	8	ဗ	4	_	8	ဗ	4	-	8	e e	4 Total
Inputs																									
FY 2000																									
FY 2001																						,			
FY 2002																									
FY 2003																									
Outputs																									
FY 2000																									
FY 2001																									
FY 2002																									
FY 2003																									
Remarks:																									
Support equipment for Aft Corner Post modification.	for Aft Corr	ner Pc	st mod	ificatio	ċ																				

	INDIVIDUAL MODIFICATION	Date	February 1997
MODIFICATION TITLE:	Improved Launcher (Deep Attack) Modifications 1-85-03-0509		
MODELS OF SYSTEMS AFFECTED:	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)		
		:	
DESCRIPTION / JUSTIFICATION:			

The Improved Launcher (Deep Attack) modification kit consists of the Payload Interface Module (PIM), with associated cables and hardware, which launcher, the EB, and the Improved Electronic Unit (IEU). The modification provides the capability of supplying power to, and communication with, payload onboard processors for transmitting prelaunch programming information and for the management of payload-peculiar time-sequencing modification provides for upgrade to the existing MLRS capabilities, including training devices, and is required to support the addition of Army TACMS and other growth capabilities. The Improved Launcher modification provides the necessary interfaces between the warheads, the interface parameters. The PIM, as part of the Improved Launcher Mod Kit, becomes the standard payload interface module for all MLRS controls command and power distribution to the warhead and a modification to the Fire Control System (FCS) Electronic Box (EB). This launchers. The incorporation of the Improved Launcher modification causes no changes to the MLRS force structure.

ACCOMPLISHED	Development complete - Incorporated into current production.			
PLANNED				
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:				

					IQN	VIDUAL	INDIVIDUAL MODIFICATION	CATION						å	Date		February 1997	1997	
MODIFICATION TITLE (Cont):		Щ	prove	d Laur	cher (Dеер	Attack)	Modifi	cations	1-85-(Improved Launcher (Deep Attack) Modifications 1-85-03-0509								
FINANCIAL PLAN: (\$ in Millions)	1008	900																	
	and Prior	orior –	FY 1997	766	FY 1998	86	FY 1999	60	FY 2000	\vdash	FY 2001	FY	FY 2002	FY 2003	\vdash	10	-	TOTAL	٩L
	Qty	s	Qt	\$	Qf	ક્ક	Oty	\$	Oty \$	Ö	\$	Qt	\$	Ö Ç	မှာ	Qt⁄	€	δ	\$
RDT&E PROCUREMENT Kit Quantity																			
Installation Kits Installation Kits Nonrecurring					 														
Equipment	363	32.2						-								· · · —		363	32.2
Equipment Nonrecurring																			
Data			•																
Training Equipment																			
Support Equipment		0.5								<u> </u>	_						-		0.5
Interim Contractor Support																			
				••			**												
Installation of Hardware	363	4						·						-				363	4.8
FY 1997 Eqpt Kits)	!						<u>.</u>	·										
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FY 2002 Eqpt kits														-					
FY 2003 Eqpt kits																			
(FY(TC) Eqpt (xx kits)	30	1					1	+		+		1			\dagger			363	4.8
Total Installation Cost	် ရှိ	4.8		1	1	1	1	\dagger	+	+	+				1	\dagger	1	3	2
Total Procurement Cost		37.5						-			4	_							37.5
METHOD OF IMPLEMENTATION Depot Field Application Contract Dates:	N Depot	Field Apr FY 1997:	oplicatik 7:		ADMIN	STRAT	ADMINISTRATIVE LEADTIME: FY 1998:	DTIME:		Months	ıths	PRODUC FY 1999:	UCTION 39:	PRODUCTION LEADTIME: FY 1999:	Σ Ψ	≥	Months		
Delivery Date:		FY 1997:	.:				FY 1998:					FY 1999:	:66						
																		İ	

FY 1996 FY 1997 FY 1998 FY 1999 FY 2000 FY 1999 FY 2000 FY 2000 FY 2001 FY 200	Installation Schedule: Improved Launcher (Deep Attack) Modifications 1-85-03-0509	tule: Imp	rove	d Lau	ncher	· (Dee	p Att	ack) №	Aodific	ations	1-85	-03-0	509				ã	Date		Febru	February 1997				
8 PHor 368 SPHOR		FY 1996		FY 18	266			7	866			FY 15	66(FY 20	8			FY 20	5				
8 Prior 363 8 Prior 363 1 2 3 4 1 2		& Prior	+	ঝ	_{CM}	41	ᠳ	C4	ы	41	⊣	αı	ro)	41		ঝ	ଚ	41	-	αl		41			ğ
8 Prior 363 8 Prior 363 1 2 3 4 1 2	Inputs																								
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FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 1 2 3 4 1 1 1 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Y 1996 & Prior	363																							က
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emarks:	Y 2003																								
	emarks:																							4	

Modification	
Individual	
khibit P-3a	
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	INDIVIDUAL MODIFICATION	Date February 1997
MODIFICATION TITLE:	Carrier Improvements Phase IV 1-94-03-0520	
MODELS OF SYSTEMS AFFECTED:	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)	
DESCRIPTION / JUSTIFICATION:		
This modification is a consolidation of nine (9) Cla Improvements include the addition of a fuel syster particulate filter unit plug for the NBC heater. This adding a map light for tactical conditions, adding a prevent the existing engine compartment fire exting the existing engine compartment fire exting existing engine compartment fire exting existing engine compartment fire exting existing engine compartment fire exting existing engine compartment fire exting existing engine compartment fire exting engine compartment engine co	This modification is a consolidation of nine (9) Class I ECPs addressing reliability, availability, maintainability, and dependability (RAM-D). Improvements include the addition of a fuel system heater valve, improved cab ventilation duct system, speedometer relocator, and a gas particulate filter unit plug for the NBC heater. This modification also corrects four (4) safety hazards by improving the commander's work station, adding a map light for tactical conditions, adding mounting provisions for an additional hand held fire extinguisher, and provides measures to prevent the existing engine compartment fire extinguisher from being inadvertently discharged.	lity, and dependability (RAM-D). beedometer relocator, and a gas proving the commander's work station, iguisher, and provides measures to
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	EVELOPMENT MILESTONES: PLANNED	ACCOMPLISHED Development complete - Incorporated into current production.

			٠		Z	nainic	AL MO	INDIVIDUAL MODIFICATION	TION							Date		Febr	February 1997	
MODIFICATION TITLE (Cont):		ပိ	ırrier I	mpro	veme	ıts Pr	ase I	Carrier Improvements Phase IV 1-94-03-0520	-03-05	20										
FINANCIAL PLAN: (\$ in Millions)	2007	Ę	. •							:										
	and Prior	_ o ō	FY 1997	266	스	1998	<u> </u>	FY 1999	<u>\</u>	FY 2000	F	2001	<u>F</u>	, 2002	F	FY 2003		10	TOTAL	Į.
	οţ	\$	ğ	8	ਰੇ	69	ð	æ	ğ	8	ð	₩	ð	\$	ģ	4	à	8	ğ	8
RDT&E												_								
PROCUREMENT																				
Kit Quantity								·												
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	758	=																	758	-
Equipment Nonrecurring																				
Engineering Change Orders																				
Data				•																
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																	·			
FY 1996 & Prior Eqpt 758	733	2.2	22	0.1			,												758	0.3
FY 1997 Eqpt Kits																			3	i
FY 1998 Eqpt Kits																				
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FY 2001 Eqpt kits			-															-		
FY 2002 Eqpt kits																				
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	733	2.2	52	0.1				_											758	2.3
Total Procurement Cost		3.3		0.1																3.4
		1																		5
METHOD OF IMPLEMENTATION Depot Field Application	N Depot Fie	eld Ap	plicatio	=	ADMIN	IISTRA	TIVEL	ADMINISTRATIVE LEADTIME:	ij	œ	Months	ဟ	PROD	UCTIO	PRODUCTION LEADTIME:	TIME:	9	Months		
Contract Dates:	Ŧ	FY 1997:					FY 1998:	:86					FY 1999:	36:						
Delivery Date:	₹	FY 1997:					FY 1998:	98:					FY 1999:	:66						
,																				

Installation Schedule: Carrier Improvements Phase IV 1-94-03-0520	e: Ca	rrier Ir	mprove	∍men	ts Ph	ase I∖	/ 1-94	-03-05	520							Date			February 1997	1997					
ű.	FY 1996		FY 1997	26			FY 1998	98			FY 1999	စ္		ĬĽ	FY 2000			Ĺ	FY 2001						
	& Prior	-1	2 1	ଚା	41	-1	⊘ 1	ଚା	41		CI.	ත ත	4	⊘ ŧ	ଠା	41	-1	~1	ଠା	41					Total
Inputs																									
FY 1996 & Prior	733	52																							758
FY 1997																									
FY 1998																									
FY 1999										•															
Outputs																									
FY 1996 & Prior	733	52																							758
FY 1997																									
FY 1998																									
FY 1999																									
		ш.	FY 2000			·	FY 2001			Ē	FY 2002			Ę	FY 2003			FY,	FY 2004			FY 2005	305		
		-	8	ဗ	4	-	7	က	4	-	Ø	က	4	-	cı.	ဗ	4	_	8	9	4	-	8	٠ د	4 Total
Inputs																									
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FY 2003																									
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FY 2003																						İ			İ
Remarks:																									
-11																									

Exhibit P-3a Individual Modification

				INDI	/IDUAL	MODIF	INDIVIDUAL MODIFICATION	z							Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		Transmission E	ssion		nic Co	ntrolle	lectronic Controller (TEC) 1-94-03-0522	()	4-03-C	522									
FINANCIAL PLAN: (\$ in Millions)	FV 1096	Г																	
	and Prior	FY 1997	266	FY 19	1998	FY 1999	66	FY 2000	8	FY 2001	100	FY 2	2002	FY 2	, 2003		TC	TOTAL	AL.
	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	S	Qty	\$	οţ	\$	Qty	€	Oty	\$	Qty	မှာ
RDT&E																			
PROCUREMENT					-		-												
Kit Quantity																			
Installation Kits											-								
Installation Kits Nonrecurring																			
Equipment	696 18.9	<u> </u>									-							969	18.9
Equipment Nonrecurring												•							
Engineering Change Orders																			
Data					-														
Training Equipment																			
Support Equipment				-															
Other																			
Interim Contractor Support																			
											,								
Installation of Hardware												•							
FY 1996 & Prior Eqpt 590	590 7.4	4																290	7.4
FY 1997 Eqpt Kits																			
FY 1998 Eqpt Kits												•							,
FY 1999 Eqpt Kits																			
FY 2000 Eqpt kits																			
FY 2001 Eqpt kits		***												-					
FY 2002 Eqpt kits																			
FY 2003 Eqpt kits																			
(FY(TC) Eqpt (xx kits)																	·		
Total Installation Cost	590 7.4	4																290	7.4
Total Procurement Cost	26.3	3																	26.3
METHOD OF IMPLEMENTATION Contr Field Team Applica	Contr Field	Team App		ADMINISTRATIVE LEADTIME:	STRATI	VE LEA	DTIME:		9	Months	_	PRODL	PRODUCTION LEADTIME:	LEAD.	IIME:	က	Months		
Contract Dates:	FY 1997:	397:			ш	FY 1998:	.,				_	FY 1999:							
Delivery Date:	FY 1997:	997:			۳	FY 1998:						FY 1999:	<u></u>						

# Prior 1 2 3 4 1 3 3 4 3 3 4 3 3 3 4 3 3 3 4 3 3 3 4 3 3 3 3 3 3 3 3 3	FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2003 FY 2004 FY 2005 FY 2001 FY 2001 FY 2005 FY 2001 FY 2005 FY 2001 FY 2001 FY 2001 FY 2005 FY 2001 FY 2001 FY 2005 FY 2001 FY 2001 FY 2005 FY 2001 FY 2001 FY 2005 FY 2001 FY 2005 FY 2006 FY 2006 FY 2007 FY 200	I anstruction of education of the state of t	lle: Irar	Smissic	on Ele	etron	္က	ntrolle	r (TEC	0,1-6	-94-03-0522)522					_	Date		Febr	February 1997					
8 Prior 6996 8 Prior 6996 1 2 3 4 1 3 3 4 3 3 4 3 3 4 3 3 3 4 3 3 3 3	8 Prior 696 SPO SP		FY 1996	Ĺ	1997			Ĺ	Y 1998			₹	1999			FY 2	000			FY 20	5					
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8. Prior 696 8. Prior 590 F.Y. 2000 F.Y. 2001 F.Y. 2002 F.Y. 2003 F.Y. 2004 F.Y. 2005 1 Z 3 4 1 Z 3 4 1 Z 3 4 1 Z 3 4 I Z 3 4 I Z 3 4 I Z 3 4 I Z 3 4 I Z 3 4 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 1 I Z 3 I Z	8. Prior 696 8. Prior 590 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 3 1 4 1 1 1 2 3 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Inputs																								
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1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 4 1 1 2 3 4 1 1 2 1 3 4 1 1 2 3 4 1 1 2 1 3 4 1 1 3 4 1 1 2 1 3 4 1 3 4 1 3 4	1 2 3 4 1 2 3			FY 20	00			FY 2	100			FY 20	02			-Y 200≀	ო		_	-Y 2004			Ŧ	2005		
i: filis (106) will be used for spares. No quantities associated with TEC contractor support in EV 97	: of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.					ဗ	4	_			·-	- 2		4	-	2		4	-	8		4		8	က	4 5
FY 2000 FY 2002 FY 2003 FY 2003 FY 2000 FY 200	FY 2000 FY 2002 FY 2003 Dutputs FY 2000 FY 2000 FY 2001 FY 2002 FY 2003 FY 200	Inputs																								
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Outputs =Y 2000 =Y 2001 =Y 2002 =Y 2003 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97	Putputs =Y 2000 =Y 2001 =Y 2002 =Y 2003 =Y 2003 =Wall be used for spares. No quantities associated with TEC contractor support in FY 97.	FY 2003																								
=Y 2000 =Y 2001 =Y 2002 =Y 2003 =Y 2003 Fernance of kits (106) will be used for sparas. No quantities associated with TEC contractor support in EY 97	=Y 2000 =Y 2001 =Y 2002 =Y 2003 Permarks: Remarks: Salance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	Outputs																								
EY 2001 EY 2002 EY 2003 Remarks: 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in EY 97	FY 2001 FY 2002 FY 2003 Remarks: Balance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	FY 2000																								
=Y 2002 =Y 2003 3emarks: 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in EY 97	=Y 2002 =Y 2003 Jemarks: 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	-Y 2001																								
=Y 2003 Remarks: 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in EY 97	=Y 2003 Remarks: Salance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	FY 2002																								
Remarks: 3alance of kits (106) will be used for spares. No quantities associated with TEC contractor support in EY 97	Remarks: Balance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	FY 2003																								
Balance of kits (106) will be used for spares. No quantities associated with TEC contractor support in EV 97	Balance of kits (106) will be used for spares. No quantities associated with TEC contractor support in FY 97.	Remarks:																								
		Balance of kits (10)	5) will be use	ad for spa	₹res. ∧	No aua	ntities	associa	ted with	TEC	ontraci	or supe	ort in F	Y 97.												

	INDIVIDUAL MODIFICATION Date February 1997
MODIFICATION TITLE: Fire S	Fire Suppression Change 1-94-03-0525
MODELS OF SYSTEMS AFFECTED: MUL'	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)
DESCRIPTION / JUSTIFICATION: The purpose of this modification is to comply with and Halons. The objective of this modification is to Substances (ODS) by Fiscal Year 2000. The initiused in lieu of the current 2.75 pound Halon bottle Command (TACOM) and began 1Q95. The secobottle to an alternative substance.	The purpose of this modification is to comply with Department of Defense Directive (DoDD) 6050.9 for the elimination of Chloroflurocarbons (CFC) and Halons. The objective of this modification is to identify and eliminate all Ozone Depleting Chemicals (ODC) and all Ozone Depleting Substances (ODS) by Fiscal Year 2000. The initial phase of this program directs modification of mounting brackets to allow CO2 bottles to be used in lieu of the current 2.75 pound Halon bottles. Swap-out for the hand-held bottles is being done by the U.S. Army Tank and Automotive Command (TACOM) and began 1Q95. The second phase will direct the modification and/or conversion of the 7 pound engine compartment Halon bottle to an alternative substance.
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	PMENT MILESTONES: PLANNED ACCOMPLISHED Will be incorporated into production.

					QNI	IVIDUA	INDIVIDUAL MODIFICATION	CATIO	2					ر	Date		Februa	February 1997	
MODIFICATION TITLE (Cont):		[[re Su	Fire Suppressi	ion Cr	ange	on Change 1-94-03-0525	3-0525											
FINANCIAL PLAN: (\$ in Millions)	500 t	900																	
	and Prior	Prior	FY 1997	766	FY 1	1998	FY 1999	66	FY 2000	F	FY 2001	FY 2002	600	FY 20	2003			TOTAL	Ā
	ģ	s	ĝ	€	δ	\$) O	+	Oty \$	ð	\$	ξ	8	ĵ Š	8	Š Š	\$	ð	S
RDT&E																			
Kit Quantity																			
Installation Kits																			
Installation Kits Nonrecurring					, ,														
Equipment			857	0.7														857	0.7
Equipment Nonrecurring																			
Engineering Change Orders						•••													
Data												·							
I raining Equipment																			
Support Equipment								-							-				
Omer																			
Interim Contractor Support																			
Installation of Hardware															•				
FY 1996 & Prior Eqpt Kits																			
FY 1997 Eqpt 857			158	0.1	430	0.1	569	0.1										857	0.3
FY 1998 Eqpt 430																			
FY 1999 Eqpt 427																		***	
FY 2000 Eqpt kits																			
FY 2001 Eqpt kits																			
FY 2002 Eqpt kits																			
FY 2003 Eqpt kits																·			
(FY(TC) Eqpt (xx kits)															-				
Total Installation Cost			158	0.1	430	0.1	569	0.1		_								857	0.3
Total Procurement Cost				0.8		0.1		0.1											1.0
METHOD OF IMPLEMENTATION Depot Field Application	Depot	-ield At	oplication		ADMINE	STRATI	ADMINISTRATIVE LEADTIME:	DTIME:	4	Months	Ω	PRODU	CTION	PRODUCTION LEADTIME:	ME	12	Months		
Contract Dates:	u	FY 1997:		31 Jan 97	26	u !	FY 1998:		31 Dec 97	3c 97		FY 1999:	<u></u>	ਲ ਹੋ	31 Dec 98				
Delivery Date:		FY 1997:		31 Jan 98	98		-Y 1998:		31 Dec 98	26.28		FY 1999:	<u>.</u>	ည	31 Dec 99				

Installation Schedule: Fire Suppression Change 1-94-03-0525	ule: Fire S	uppres	sion	Char	ge 1-6	34-03-C	525								Date		-	February 1997	1997				
	FY 1996	F	FY 1997			FY 1	FY 1998			FY 1999	6		ш	FY 2000			Ŧ	FY 2001					
	& Prior 1	€	ଚା	41	ᆏ	% 1	_ල	41	-1	C I	 დ	4 1		2 83	41	-	СЩ	വ	41				Total
Inputs																							
FY 1996 & Prior																							
FY 1997		100	300	0 457	۲.																		857
FY 1998																							
FY 1999																							
Outputs																							
FY 1996 & Prior																							
FY 1997		27	200	00 200	0 150) 150	130																857
FY 1998																							
FY 1999																							
		FY 2000	00			FY 2001	5		Ĺ	FY 2002			Ŧ	FY 2003			FY 2004	904			FY 2005	95	
		1	7	က	4	2	Ø	4	-	7	က	4	-	8	ဗ	4	_	8	, د	4	1 2	6	4 Total
Inputs																							
FY 2000																							
FY 2001																					,		
FY 2002																							
FY 2003																							
Outputs																							
FY 2000																							
FY 2001																							
FY 2002																							
FY 2003																							
Remarks:																							

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Exhibit

MODELS OF SYSTEMS AFFECTED: MULTIPLE LAUNCH ROCKET SYSTEM (MLRS) BESCRIPTION JUSTIFICATION: A special interim launcher configuration is required to allow the current M270 platform to fire all of its existing fielded M270 Family of Munitions (MFOM) and incorporate a new requirement for fire the Block IA, Army TACAMS Missile System. The Block IA, Army TACAMS Missile System. The Block IA, missile manurable product a propertion and requirement for GPS in the fielding of the Position Navigational Unit [POSNAV Unit (PNUJ)] with the incrporate a new rediffication for the existing fielded M270 Family of Munitions (MFOM) will require global positioning system (GPS) in fire the Block IA, Army TACAMS Missile System (MFOS) in fire the Block IA, Army TACAMS Missile System (MFOS) in fire the Block IA, Army TACAMS Missile System (MFOS) in fire the Block IA, Army TACAMS Missile System (MFOS) in fire the Block IA, Army TACAMS Missile System (MFOS) in fire the Block IA, Army TACAMS Block IA,			Date February 1997
MODELS OF SYSTEMS AFFECTED: MULTIPLE LAUNCH ROCKET SYSTEM (MLRS) DESCRIPTION / JUSTIFICATION: A special interim launcher configuration is required to allow the current M270 platform to fire all of its existing fielded M270 Family of Munitions (MCM) and incorporate a new requirement to fire fire Block IA, Army TAGMS Missile System (At missile with the binary in the Tagmory and an incorporate a new requirement to fire fire Block IA, Army TAGMS Missile System (ACS) in Front of June for the Control of System (FCS) in Front of June (ACM) in the modification must be accelerated because the pre-planned product improvement for GPS was not planned until the fielding of the Position Navigational Unit (POSIAVV Unit (PNUJ) with the Improved Fire Control System (FCS) in Front of Tagmory (MLPA) and the Machana associated cabing with amnor protection, hoist bumper pads, a modification to the existing M8 Missiled-Launch Pod Assembly (MLPA) trainer, and sufficient Random Access Memory (RAM), with the Non Volatile Memory Module (NVMM) to support the software loaded into the IEU. DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES: PLANNED ACCOMPLISHED A	Interim IPDS Lau	33-0528	
A special interim launcher configuration is required to allow the current M270 platform to fire all of its existing fielded M270 Family of Munitions A special interim launcher configuration is required to allow the current M270 platform to fire the Block IA, Army TACMS Missile System. The Block IA missile will be fielded in 10FY98 and will require global positioning system (GPS) interface at time of launch. This modification must be accelerated because the pre-planned product improvement for GPS was not planned until the fielding of the Position Navigational Unit [POSNAV Unit (PNU)] with the Improved Fire Control System (IFCS) in PY00. The modification will incorporate the IPOS Line Replaceable Unit (LAN), a GPS antenna, associated cabling with amorp protection, holst bumper pads, a modification to the existing M68 Missile/Launch Pod Assembly (MLPA) trainer, and sufficient Random Access Memory (RAM), with the Non Volatile Memory Module (NVMM) to support the software loaded into the IEU. PLANNED Will be misgrated into pre IEU. ACCOMPLISHED ACCOMPL		ET SYSTEM (MLRS)	
Will be integrated into launchers as an interim program in support of ATACMS Block 1A.	A special interim launcher configuration is required to allow the current M (MFOM) and incorporate a new requirement to fire the Block IA, Army T will require global positioning system (GPS) interface at time of launch. improvement for GPS was not planned until the fielding of the Position N System (IFCS) in FY00. The modification will incorporate the IPDS Line protection, hoist bumper pads, a modification to the existing M68 Missile Memory (RAM), with the Non Volatile Memory Module (NVMM) to suppo	le current M270 platform to fire all of its existing fie IA, Army TACMS Missile System. The Block IA mi of launch. This modification must be accelerated be Position Navigational Unit [POSNAV Unit (PNU)] IPDS Line Replaceable Unit (LRU), a GPS antenr M68 Missile/Launch Pod Assembly (M/LPA) trainer.	elded M270 Family of Munitions nissile will be fielded in 1QFY98 and because the pre-planned product with the Improved Fire Controlina, associated cabling with armorit, and sufficient Random Access
	DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	Will be integrated into launchers as an interim program in support of ATACMS Block 1A.	ACCOMPLISHED

				IND	IVIDUAL	INDIVIDUAL MODIFICATION	CATION	7						Date		Februs	February 1997	
MODIFICATION TITLE (Cont):		Interim	I SOAI	-aunc	ler 1-9	Interim IPDS Launcher 1-94-03-0528	528									:		
FINANCIAL PLAN: (\$ in Millions)	EV 1006	г																
	and Prior	FΥ	FY 1997	7	1998	FY 1999	 8	FY 2000	FY	2001	FY	2002	FY 2003	600	1		TOTAL	_AL
	Qty \$	ğ	\$	ĝ	\$	Qty	H	Qty \$	Qty	\$	ģ	\$	Qţ	\$	ਣੇ	ક્ક	Qty	\$
RDT&E PROCUREMENT Kit Quantity Installation Kits Nonrecurring Equipment Equipment Nonrecurring Equipment Nonrecurring Engineering Change Orders Data Training Equipment Support Equipment Other Installation of Hardware FY 1996 & Prior Eqpt Kits FY 1999 Eqpt Kits FY 1999 Eqpt Kits FY 1999 Eqpt Kits FY 2001 Eqpt Kits FY 2002 Eqpt Kits FY 2002 Eqpt Kits FY 2002 Eqpt Kits FY 2002 Eqpt Kits FY 2002 Eqpt Kits FY 2002 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2003 Eqpt Kits FY 2005 Eqpt Kits	29 16.2	8	0.5		0.5		9.2		9.0	9.0		0.7		0.7			59	16.2
Total Installation Cost									-									
Total Procurement Cost	16.2	2	2.2		0.5		0.5	_	9.0	0.6		0.7		0.7				22.0
METHOD OF IMPLEMENTATION Contract Field Integration Contract Dates: Pelivery Date: FY 1997:	l Contract Field Ir FY 1997: FY 1997:	əld Inteq 997: 997:	ration	ADMIN	ISTRAT	ADMINISTRATIVE LEADTIME: FY 1998: FY 1998:	DTIME:		6 Months	ths	PRODUC FY 1999: FY 1999:	PRODUCTION LEADTIME: FY 1999: FY 1999:	I LEADT	IIME:	12	Months		

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	INDIVIDUAL MODIFICATION Date February 1997
MODIFICATION TITLE:	Interim MS Launcher 1-94-03-0529
MODELS OF SYSTEMS AFFECTED:	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)
DESCRIPTION / JUSTIFICATION:	
A special interim launcher configuration is require (MFOM) and incorporate a new requirement to first measure low altitude winds at the time of launch a because the pre-planned product improvement for Fire Control System (IFCS) in FY00. The compor Electronics Unit (MS-EU) and MS-Tranceiving Unit he software loaded into the IEU. The current IEU (NVMM).	A special interim launcher configuration is required to allow the current M270 platform to fire all of its existing fielded M270 Family of Munitions (MFOM) and incorporate a new requirement to fire the Extended Range (ER) - MLRS beginning in 1QFY99. This modification is required to measure low altitude winds at the time of launch and will thus improve accuracy with increased range. This modification must be accelerated because the pre-planned product improvement for GPS was not planned for until the fielding of the Meteorological Sensor (MS) with the Improved Fire Control System (IFCS) in FY00. The components for this modification are the two IFCS MS Line Replaceable Units (LRUs), i.e., MET Sensor-Electronics Unit (MS-EU) and MS-Tranceiving Unit (MS-TU), associated kit components and sufficient Random Access Memory (RAM) to support the software loaded into the IEU. The current IEU P/N 13210269 will be modified to IEU P/N 13210255, with the Non Volatile Memory Module (NVMM).
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:	PLANNED ACCOMPLISHED Will be integrated into launchers as an interim program in support of ER-MLRS.

				IND	IVIDUA	L MODI	INDIVIDUAL MODIFICATION	NC						ď	Date		Februs	February 1997	
MODIFICATION TITLE (Cont):	_	nterim	Interim MS Lau	aunche	ır 1-94	ıncher 1-94-03-0529	53												
FINANCIAL PLAN: (\$ in Millions)	007 A	-																	
	and Prior	Ŧ	FY 1997	FY	FY 1998	FY 1999	666	FY 20	2000	FY 2001	9	FY 2002	70	FY 2003	03	TC		TOTAL	AL.
	Oty \$	ð	s	ģ	\$	Qty	\$	Qty	\$	Oty Oty	S	Qty	\$	Qty	\$	Qty	\$	Qty	s
RDT&E																			
PROCUREMENT																			
Kit Quantity																-			
Installation Kits																			
Installation Kits Nonrecurring							******												
Equipment	10 9.9																	10	9.6
Equipment Nonrecurring															·				
Engineering Change Orders																			
Data	•											-							
Training Equipment						•						-							
Support Equipment*							•												
Other																			
Interim Contractor Support			0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.7
													•						
Installation of Hardware							_												
FY 1996 & Prior Eqpt Kits	,																		
FY 1997 Eqpt Kits							_									-			
FY 1998 Eqpt Kits																			
FY 1999 Eqpt Kits	<u> </u>															•			
FY 2000 Eqpt kits												•							
FY 2001 Eqpt kits																			
FY 2002 Eqpt kits																			
FY 2003 Eqpt kits																			
(FY(TC) Eqpt (xx kits)																			
Total Installation Cost											•								
Total Procurement Cost	9.9	6	0.1		0.1		0.1		0.1		0.1		0.1		0.1		·		10.6
* Support equipment for interim launcher pool upgrade.	uncher pool u	pgrade																	
METHOD OF IMPLEMENTATION Contract Field Integration	l Contract Fie	ld Intea	ration	ADMIN	IISTRA	IIVE LE	ADMINISTRATIVE LEADTIME:		9	Months	_	PRODUCTION LEADTIME:	NOIL	LEADTI	ΜË	4	Months		
Contract Dates:	FY 1997:	:26				FY 1998:	. :				_	FY 1999:							
Delivery Date:	FY 1997:	97:				FY 1998:	3:				_	FY 1999:							

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February 1997			nd unnecessary standardize the Jirect Support	Development complete - Incorporated into current production.
Date			ESCRIPTION / JUSTIFICATION: This modification provides a more reliable and stronger hoist carriage assembly, which will prevent cracks to the assembly and unnecessary bending of the "spider" beam. The modification will incorporate two Class I ECPs into 376 US Army M270 launchers and will standardize the fleet with one hoist carriage assembly common to the -202/-203 configuration M270 launcher. This modification will reduce Direct Support maintenance manhours and improve overall operational readiness.	ACCOMPLISHED Development complete - Incorporated into current
			will prevent cracks 376 US Army M270 uncher. This modifi	PLANNED
DIFICATION)530	'STEM (MLRS)	ge assembly, which Class I ECPs into :	<u>a</u>
INDIVIDUAL MODIFICATION	Hoist Carriage Assembly 1-95-03-0530	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)	ESCRIPTION / JUSTIFICATION: This modification provides a more reliable and stronger hoist carrial bending of the "spider" beam. The modification will incorporate two fleet with one hoist carriage assembly common to the -202/-203 columnitienance manhours and improve overall operational readiness.	STONES:
	Hoist Carriage A	MULTIPLE LAL	ESCRIPTION / JUSTIFICATION: This modification provides a more reliable and stron bending of the "spider" beam. The modification will fleet with one hoist carriage assembly common to the maintenance manhours and improve overall operations.	DEVELOPMENT MILESTONES:
	TITLE:	MODELS OF SYSTEMS AFFECTED;	JUSTIFICATION: ation provides a rr he "spider" beam. hoist carriage as manhours and in	STATUS / MAJOR DE
	MODIFICATION TITLE:	MODELS OF SY:	DESCRIPTION / JUSTIFICATION: This modification provides bending of the "spider" bestleet with one hoist carriage maintenance manhours an	DEVELOPMENT

					S	MIDUA	L MOD	INDIVIDUAL MODIFICATION	NO O							Date		Februs	February 1997	
MODIFICATION TITLE (Cont):		유	Hoist Carriage	rriage		mbly	1-95-0	Assembly 1-95-03-0530												
FINANCIAL PLAN: (\$ in Millions)		[,																		
	FY 1996 and Prior	ا ة و	FY 19	1997	FY 1998	866	₽,	1999	FY 2	2000	FY;	FY 2001	FY	FY 2002	FY 2	FY 2003	F	10	TOTAL	AL
	Qty	Н	δ	છ	Š	s	ð	S	Öţ	s	Οţ	\$	Qţ	49	Qţ	છ	Qty	ક્ર	Q	8
RDT&E																				
PROCUREMENT Kit Ouanity		2/8/														•				
Installation Kits																			<i>J.</i> ———	
Installation Kits Nonrecurring																				
Equipment	376	3.3																	376	3.3
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
I raining Equipment																				
Support Equipment																				
Date of Contractor Support																				
Installation of Hardware																				
FY 1996 & Prior Eqpt - 376*	143	0.5	233	6.0															376	4.1
FY 1997 Eqpt - Kits		×																		
FY 1998 Eqpt Kits			-																	
FY 1999 Eqpt Kits																				
FY 2000 Eqpt kits																				
FY 2001 Eqpt kits																				
FY 2002 Eqpt kits			•																	
FY 2003 Eqpt kits																				
(FY(TC) Eqpt (xx kits)																				
Total Installation Cost	143	0.5	233	6.0															376	1.4
Total Procurement Cost		3.8		6.0																4.7
METHOD OF IMPLEMENTATION Depot Field Application Contract Dates:	I Depot Fi	Field Apr FY 1997:	plication:		ADMIN	ISTRA ⁻	FY 1998:	ADMINISTRATIVE LEADTIME: FY 1998:	ய்	0	Months	Ø	PRODUC FY 1999:	UCTION 19:	PRODUCTION LEADTIME: FY 1999:	TIME:	4	Months		
Delivery Date:	Œ	FY 1997:					FY 1998:	38:					FY 1999:	:66						

Installation Schedule: Hoist Carriage Assembly 1-95-03-0530	lule: F	loist C	Jarria	ge As	semb	ly 1-9	5-03-	0230									Date		Febr	February 1997						
	FY 1996	~	Ā	FY 1997			£	FY 1998			FY 1999	666			FY 2000	8			FY 2001	10						
	& Prior	ᆔ	СЛĮ	ଠା	41	-	C 1	വ	41	-	СI	വ	41		2 1	ကျ	41	-1	C/I	ଠା	41				욉	Total
Inputs																										
FY 1996 & Prior	65	5 75	5 105	5 93		38																			•••	376
FY 1997																										
FY 1998																										
FY 1999																										
																										¥
Outputs																										-
FY 1996 & Prior	12	53	3 99	9 125		87																			••	376
FY 1997																										
FY 1998																										
FY 1999																										
			FY 2000	90			FY 2001	001			FY 2002	ğı		ш	FY 2003	~		ш	FY 2004			₹	FY 2005			
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Inputs																										
FY 2000																										
FY 2001																										
FY 2002																										
FY 2003																										
Outputs																										
FY 2000																										-
FY 2001																										
FY 2002																										
FY 2003																										
Remarks:																										

	INDIVIDUAL MODIFICATION	Date	February 1997
MODIFICATION TITLE:	Obsolescence Mitigation/ECP Reliability Integration 1-95-03-Obsc		
MODELS OF SYSTEMS AFFECTED: MULTIPLE LAU	MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)		
DESCRIPTION / JUSTIFICATION:			

this modification will reestablish the MLRS baseline at the optimal configuration for integration of IFCS and ILMS (MC No. 0519 and 0526) by aiding already obsolete or rapidly approaching obsolescence. The funding on this program will procure modification kits which will incorporate improved Technology obsolescence is dictating the replacement of many launcher components. A study performed showed by the year 2003 over 70% of the electronic components will be obsolete and will not be replaceable. Circuit Cards in the line replaceable units (LRUs) e.g., IEU and FCU, are in the calibration of the system, providing required accuracy levels for new and future munitions, increasing reliability of early configuration of the components necessary to replace parts no longer available. Program Office support costs are included within this modification line. In addition, programmed for Army Technical Architecture Migration Phase I for communications software changes to meet the VCSA ATA Implementation launcher which reduces O&S costs, and eliminating noise and multiple software requirements. Also, funding in FY 00 and FY 01 will be

ACCOMPLISHED			
PLANNED	Will incorporate ongoing obsolescence analysis and determination into production.		
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:			

					IND	VIDUA	INDIVIDUAL MODIFICATION	FICATIO	N]	Date		Febru	February 1997	
MODIFICATION TITLE (Cont):		g	soles	Obsolescence	Mitiga	tion/E	CP Re	liability	y Integ	Mitigation/ECP Reliability Integration 1-95-03-Obsc	1-95-(33-Ob	၁၄							
FINANCIAL PLAN: (\$ in Millions)		1																		
	FY 1996		ļ		i					ŀ		ŀ								
	and Prior	Ď v	FY 1997	\$	¥ 4	1998	FY 1999	66 v	FY 2000	8 4	FY 2001	5 4	FY 2002	8	FY 2003	ည် ဗိ	Ě	2	TOTAL	AL AL
RDT&E	<u> </u>	,	;	,	3	•	<u> </u>	•	 	•	<u>}</u>	9	<u>}</u>	9	<u>}</u>	9	3	9	§	Ð
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring				-																
Equipment		2.5		4.	-,	1.0		1.0		0.8		-		Ξ		0.				9.6
Equipment Nonrecurring																				
Engineering Change Orders											_				-	•				
Data										-										
Training Equipment																				**
Support Equipment*										0.2	-	0.2	····	_	•	, ,				0
Other		-																		;
Interim Contractor Support						-														
														*	-					
	···																			
Installation of Hardware													•							
FY 1996 & Prior Eqpt Kits											_									
FY 1997 Eqpt Kits																				
FY 1998 Eqpt Kits																				
FY 1999 Eqpt Kits																				
FY 2000 Eqpt kits		-							~											
FY 2001 Eqpt kits				·												_				
FY 2002 Eqpt kits						-											-			
FY 2003 Eapt kits																				
(FY(TC) Egpt (xx kits)		_														-				
Total Installation Cost		-		\dagger		T	T	t	╁	1				+		T				
Total Procurement Cost		22	┢	4		0.		10	-	0	H	7.3		-		5	Ī			10.0
* Support equipment funds show breakout of Phase I ATA requirement	eakont	f Phas	e I ATA	require	ment															2
METHOD OF IMPLEMENTATION				4	NIMIN	TPAT	DMINISTRATIVE EADTIME:	Ţ		2	Months	ā	PRODUCTION I EADTINE:	I MOIT	FCAR	Ŭ.	_	Months		
Contract Dates:	Ŧ	FY 1997:		ζ			FY 1998:	į 		Ξ	2	ĹĹ	FY 1999:] [i E	-	MOTIFIES		
Delivery Date:	Ţ	FY 1997:				ц.	FY 1998:					Ĺ	FY 1999:							
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BUDGET ITEM JUSTIFICATION SHEET February 1987 AMERICE PROCUEDER/TISPING AMERICAL TO PROCEED AMERICAN TO PROCEED AM							DATE		
Pri TIEM NOMESHOLATION PROPRIES AND FIED NAMESHOLATION PROPR		BUDG	ET ITEM JUSTIF	ICATION SHEE	1:				
FY 1996 FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2000	APPROPRIATION / BUDGET AC				P-1 ITEM NOMENCLATURE				
FY 1996 FY 1997 FY 1999 FY 1999 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2001 FY 2000 FY 2000 FY 2000 FY	2	4ISSILE PROCUREMENT /S	pares and Repair Parts				SPARES AND REPA	H PAH1S (CA0250)	
ption: Provides for procurement of spares to suggestion: Provides for procurement of spares to suggestion: The funds in this account procure depot fense Business Operations Fund. To provide in the breakout: FY 1996 FY 199		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
ption: Provides for procurement of spares to su cation: The funds in this account procure depot fense Business Operations Fund. To provide ir breakout: FY 1996 FY 1996	QUANTITY	0	0	0	0	0	0	0	0
ption: Provides for procurement of spares to su cation: The funds in this account procure depot fense Business Operations Fund. To provide it breakout: FY 1996	COST (in millions)	11.5	12.1	11.3	21.4	22.0	31.6	38.8	43.6
ation: The funds in this account procure depot fense Business Operations Fund. To provide ir breakout: FY 1996	Description: Provic	Jes for procureme	ent of spares to su	pport initial field	ing of new or mod	lified end items			
fense Business Operations Fund. To provide in the breakout: breakout: Mods Mods 3.4 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6	Inotification: The f	soos sidt ai span	toneb enimona tai		(DI Be) secondan	r items from the	Supply Manager	nent, Army busin	ess area of
FY 1996 FY 1998 FY 1918 FY 1996 FY 1998 FY 1918 FY 1996 FY 1998 FY 110 FY 1996 FY 1996 FY 1998 FY 110 FY 1996 FY 1996 FY 1998 FY 110 FY 1996 FY 1996 FY 1998 FY 1998 FY 110 FY 1996 FY 1996 FY 1998 FY 1	the Defense Busing spares breakout:	ess Operations Fr	and. To provide in	itial support, fur	ds are normally r	equired in the s	ame year that en	d items are fielde	d. Initial
FY 1996 FY 1997 FY 1998 FY 189									
5.1 1.0 fS Mods 3.4 7.0 2.7 ow 2.3 5.7 Mods 2.0 1.8 1.0	System		FY 1996	FY 1997	FY 1998	FY 1999	_,		
4S 1.0 1.0 Mods 3.4 7.0 2.7 ow 1.0 2.3 5.7 Mods 2.0 1.8 1.0	Javelin					4.2			
4S 1.0 1.0 Mods 3.4 7.0 2.7 Ir Mods 1.0 2.3 5.7 Mods 2.0 1.8 1.0	MLRS		5.1		1.0	7.1			
3.4 7.0 2.7 1.0 2.3 5.7 2.0 1.8 1.0	ATACMS			1.0					
1.0 2.3 5.7 2.0 1.8 1.0	Patriot Mods		3.4	7.0		3.6			
2.3 5.7 2.0 1.8 1.0	Avenger Mods		1.0						
2.0 1.8 1.0	ITAS/TOW			2.3		5.8	_		
	MLRS Mods		2.0	1.8		Ψ.			

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Totals

						DATE		
	BUL	BUDGET ITEM JUSTIFICATION SHEET	TIFICATION SHI	EET		-	February 1997	
APPROPRIATION / BUDGET ACTIVITY	TIVITY			P-1 ITEM NOMENCLATURE	***			
MISSILE PROCUREMENT /Support Equipment	REMENT /Sup	port Equipment	and Facilities		AIR	DEFENSE TA	AIR DEFENSE TARGETS (C93000)	(000
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	6.6	6.2	1.0	1.0	1.0	1.0	1.0	1.0

DESCRIPTION:

worldwide active Army and Reserve Component air defense training, including quality assurance, lot acceptance, production qualification, and first The Air Defense Targets Program provides fixed wing, rotary wing, ballistic and towed targets; target control systems; and ancillary equipment for article tests. During the budget years, targets to be procured include many different varieties, ranging from 1/9-scale training targets to realistic, full scale threats, as well as the Ballistic Aerial Target System (BATS). Towed targets to be procured include the Infrared (IR) Training Target. Target ancillary hardware includes items such as the target group set, scoring hardware and installation kits, scoring ground support equipment, IR augmenters, radar altimeters, and low altitude kit.

JUSTIFICATION:

training targets, target control systems and ancillary equipment. Training requirements are generated by DA major field commands and provided to Fighting Vehicle (BSFV) and LINEBACKER. Major items of target hardware which support or will support soldier training include MOM-107, Radio TMO at an annual DA-sponsored targets conference. These field requirements have been scrubbed against HQDA fielding and force restructuring In support of soldier training, targets are provided to support fielded AVENGER, MANPADS, AIR-TO-AIR STINGER, PATRIOT, Bradley STINGER Controlled Miniature Aerial Target (RCMAT), Ballistic Aerial Target System (BATS), 1/5 Scale Remotely Piloted Vehicle Targets (RPVTS), towed plans, and are consistent with approved training doctrine.

Army programs. Major items of target hardware which support or will support these tests include ancillary items, MQM-107, 1/5 Scale RPVTS, target control systems, drone control kits and BATS. To provide for sustained operations of target systems, it is necessary to establish operational pools In support of weapon systems testing, targets are provided on a reimbursable basis to STINGER, PATRIOT, U.S. Navy, U.S. Air Force, and other which vary in size depending on quantity and frequency of flights which must be supported.

Missiles Cost Analysis	۷	A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 5 / Su	T ACTIVITY CUREME	/ TITLE/NO VT / 5 / Support	. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 5 / Support Equipment and	B. WEAPON AIR DE	IN DEFENSE TA	VEAPON AIR DEFENSE TARGETS (C93000)	(000)	C. MANUFACTURER NAME		D. DATE Febru	DATE February 1997
	9			Facilities		200							,
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MQM-107 -Airframe/Engine -Technical Publications -Engineering Costs -Other Costs		1853 780 2633			1912 727 2639			665 333 988			664 996		
RCMAT -Hardware -Operating Costs -Other Costs		52 22 74			50 19								
1/5 SCALE -Hardware -Operating Costs -Other Costs SUBTOTAL		176 60 99 335	112	a	618 120 280 1018	150	4						
BATS -Airframes -Aocket Motors -Other Hardware -Operating Costs -Other Costs SUBTOTAL		874 109 414 1397	157	VAR	425 55 183 663	7000	VAR						
TOWED TARGETS -Operating Costs -Other Costs SUBTOTAL		77 32 109			21 75								
ANCILLARY/AUGMENTATION -Hardware - Plece Parts CIK-170 Scoring Kits - GSQ-102 Scoring Ground Stations - RCMAT CIK-206 Scoring Kits - Universal Fins w/CDOPS - CIK-228 Scoring Kits - RCMAT CIK-206 Scoring Kits - RCMAT CIK-206 Scoring Kits - Operating Costs - Other Costs - Other Costs		909 532 606 2047	200	a	881 375 475	470	N					**************************************	
GRAND TOTAL		6595			6195			866			966		

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B. APPROPRIATION / BUDGET ACTIVITY MISSII F PROCLIBEMENT / 5 / SUDDOCT	VT / 5 / Support Faulipment and Facilities	nt and E	-acilities		<u>c. P-1 ITEM N</u> AIR D	C. P-1 ITEM NOMENCLATURE AIR DEFENSE	P-1 ITEM NOMENCLATURE AIR DEFENSE TARGETS (C93000)) STE	2930	(00
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1/5 SCALE FY96 FY97	Continental RPV, Barstow, CA Continental RPV, Barstow, CA	1	MICOM	Oct-95 Oct-96	Jun-96 Feb-97	112	4 4	 		
rames ier Hardware	Lockley Mfg., New Castle, PA	Ţ.	MICOM	Jan-96	Jan-97	157	VAR	Yes		
	Lockley Mfg., New Castle, PA.	Ð.	MICOM	Oct-96	Jan-97	2000	VAR	Yes		
ANCILLARY/AUGMENTATION FY96 - RCMAT CIK-206 Scoring Kits	Cartwright Eng., Fullerton, CA	Ğ.	MICOM	Oct-95	May-96	200	N	Yes		. 2
FY97 - RCMAT CIK-206 Scoring Kits	Cartwright Eng., Fullerton, CA	ይ	MICOM	Oct-96	Oct-96 May-97	470	. 2	Yes		
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Exhibit P-40 Sudget Item Justification Shee
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						DATE		
	BOE	BUDGET ITEM JUSTI	FIFICATION SHEET	EET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	TIVITY			P-1 ITEM NOMENCLATURE	E			
MISSI	LE PROCUREMENT /Supp	MISSILE PROCUREMENT / Support Equipment and Facilities				ITEMS LESS THAN \$2.0M (MISSILES) (CL2000)	M (MISSILES) (CL2000)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	. 1.0	1.0	1.0	6.0	1.0	1.0	1.1	1.1

DESCRIPTION: Provides for procurement of various tools and shop sets to support the Army's missile systems worldwide.

JUSTIFICATION: Funding is required for procurement of tool and shop sets to support the following systems:

MLRS TOW AVENGER

Missiles Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO MISSILE PROCUREMENT / 5 / Su	ET ACTIVIT	. APPN / BUDGET ACTIVITY TITLENO MISSILE PROCUREMENT / 5 / Support Equipment and	Equipment and	B. WEAPON ITEMS LES	N SS THAN \$2.0	B. WEAPON ITEMS LESS THAN \$2.0M (MISSILES) (CL2000)		C. MANUFACTURER NAME ANNISTON DEPOT	RER NAME N DEPOT	D. DATE Febr	.TE February 1997
	1			Facilities						WAREHOUSE 30	OUSE 30		
Missies	₽		FY 96			FY 97			FY 98			FY 99	
Cost Elements	8	TotalCost	Q fy	UnitCost	TotalCost	Oty O	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	000\$	000\$	Each	\$000	000\$	Each	\$000	000\$	Each	\$000
ALL ARE MISSILE TOOL KITS. NO MODS													
1. MLRS COMPONENTS ASSEMBLY	∢	402 215			487			467 250			469 251		
2. TOW COMPONENTS ASSEMBLY	⋖	65 35			91			р 8			14		
3. AVENGER COMPONENTS ASSEMBLY	∢	165 89			142 78			140			132		
TOTAL		971			991			954			941		
NOTE: EACH SYSTEM HAS MORE THAN ONE KIT WITH VARYING QUANTITIES AND UNIT COSTS FOR EACH KIT.													
								:					

						DATE		
	BUC	BUDGET ITEM JUSTIFICATION SHEET	TIFICATION SH	EET			February 1997	
APPROPRIATION / BUDGET ACTIVITY	YTIVI			P-1 ITEM NOMENCLATURE	ш			
MISSIN	MISSILE PROCUREMENT /Support Equipment and Facilitie	nt Equipment and Facilities				MISSILE DEMILITARIZATION (HI2000)	HZATION (HL2000)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Description: The Missile Demilitarization Program provides for the demilitarization of U.S. Army missiles and missile components that are obsolete or excess to the Army requirements following the guidelines of the Resource Conservation and Recovery Act.

Justification: The backlog of missiles requiring demilitarization is a growing concern of the Department of the Army. Changes during the past few on the CONUS wholesale storage base. There are some 52,000 missiles and 100,000 missile components utilizing 99 premium storage igloos that require demilitarization. FY98 will continue the process of demilitarization priority one (obsolete, excess, environmental concern and using military forces, retrograde of weapon system assets from Europe and major changes in war reserve planning have placed a tremendous strain years in the worldwide political environment have resulted in drastic changes in military strategies. Reduced requirements of prepositioned valuable storage space) missiles, i.e., Shillelagh.

Miccilian A tagain	È	A. APPN / BUDGET ACTIVITY TITLE/NO MISSII F PROCLIBEMENT / 5 / Support Equipment and	T ACTIVITY	TITLE/NO T / 5 / Support	_	B. WEAPON	N H DEAN ITAE	IEAPON MISSII E DEMII ITABIZATION (UI 2000)		C. MANUFACTURER NAME		D. DATE	(TE
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	₽		FY 96			FY 97			FY 98			FY 99	
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SS-11(M22)													
DEMILITARIZATION		102	· 		107								
ОТНЕВ		25		***	24								
NIKE HERCULES								09			69		
DEMILITARIZATION								15			14		·
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TOTAL		1643			1532			1507			1496		
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	BUDG	BUDGET ITEM JUSTIF	IFICATION SHEET	T:		February 1997		
APPROPRIATION / BUDGET ACTIVITY	YTIVITY			P-1 ITEM NOMENCLATURE	118			
HSSIN	MISSILE PROCUREMENT /Support Equipment and Facilities	ort Equipment and Facilities				PRODUCTION BASE SUPPORT (CA0100)	SUPPORT (CA0100)	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	0	0	0	0	0	0	0	0
COST (in millions)	2.8	3.5	3.4	3.3	3.6	3.6	3.9	3.9

production and production testing of missile systems or missile components. Funds are used to establish, modernize, expand or replace Army-owned DESCRIPTION: This program provides for Production Support and Equipment Replacement (PSR) of Government owned equipment used in industrial facilities.

or instrumentation and modernization of test facilities at the Redstone Arsenal Technical Test Center and White Sands Missile Range. This project is JUSTIFICATION: The FY98/FY99 request includes the above routine maintenance on real property, replacement/rehabilitation of existing equipment also essential in sustaining the Army's missile warhead production capability, eliminating safety hazards, etc., at the lowa Army AMMO Plant.

A detailed summary project listing is attached.

Production Support and Facilities Projects	DATE		February 1997	
APPROPRIATION / BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE			
MISSILE PROCUREMENT /Support Equipment and Facilities	PRODUC	PRODUCTION BASE SUPPORT (CA0100)	(CA0100)	
PROJECT NO. TYPE NAME / LOCATION	EY 1996	FY 199Z	FY 1998	FY 1999
39X2169 PSR, Redstone Arsenal Rocket Engine (RARE) Facility Thiokol Corp, producers of Solid Rocket Motors, closed its Redstone facility in September 1996. Due to the Thiokol's mission, an Environmental Baseline Study (EBS) has been performed to assess and establish liability for contamination. Funds will be used to complete environmental studies, demolition/asbestos abatement or other documentation related to closure of RARE that is required by environmental laws or that which is in the best interest of the government.	1.316	1.947	1.814	1.775
93X5069 PSR, White Sands Missile Range Funds replacement and initial purchase of equipment and instrumentation used in production testing of missile systems and components. Supported systems include ATACMS, MLRS, PATRIOT, SADARM. This project will procure computer system upgrades, replace test equipment and provide communications security equipment.	0.800	1.095	1.000	1.000
93X5071 PSR, Redstone Arsenal Technical Test Center (RTTC) This equipment is required for modernization of test facilities and equipment in the Dynamic, Static, and Electronic Component Test Branches of the Redstone Technical Test Center.	0.200	0.224	0.250	0.250

Production Support and Facilities Projects		DATE	February 1997	
APPROPRIATION / BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE			
MISSILE PROCUREMENT /Support Equipment and Facilities	PRC	PRODUCTION BASE SUPPORT (CA0100)	(CA0100)	
PROJECT NO. TYPE NAME/LOCATION	EY 1996	EY 199Z	FY 1998	FY 1999
3902335 MISSILE AUTOMATIC TEST EQUIPMENT (MATE) Annual project to maintain and upgrade Missile Automatic Test Equipment used in depot level maintenance of various missile systems.	0.383			
This project is essential to sustain the Army's missile warhead production capability, eliminate safety hazards by replacing worn equipment and rehabilitation of facilities. Further, this project will improve the Heating Ventilation and Air Conditioning (HVAC) in the TOW production area, provide fire protection in Bldg I-40 assembly area and upgrade process controllers in various areas.	0.149	0.200	0.300	0.300